LMS Final Report

April 5, 2007

Instructional Technology Resource Center
Idaho State University

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Executive Summary

The Idaho State University (ISU) currently utilizes WebCT 4.0 learning management system (LMS) to deliver course materials and activities via the Internet. A typical upgrade path would be to upgrade to WebCT 6.0, but that process has been identified as a larger shift in support, resources, and flexibility than previously required for WebCT version upgrades. In 2006, ISU started evaluating various LMS products to help align the needs, vision, mission, and support structure of the University.

The ITRC recommends moving our LMS from WebCT to Moodle. Moodle, like any LMS, is not the perfect solution for our institution, but provides many more options and opportunities to better develop a solution that meets the needs of ISU. Although not universally favored by ISU faculty, the recommendation to make Moodle is the result of an extensive process that included a wide array of stakeholders in the evaluation.

A group of faculty, students, support staff, and administrators were selected to evaluate WebCT, Sakai, and Moodle in a series of focus groups during the spring semester of 2006. Based on the data collected from LMS Focus Group Report, the ITRC proposed a full-scale evaluation of Moodle. Faculty members in the academic year 2006-2007 received ITRC support to begin prototyping their courses in Moodle. A pilot of Moodle evaluated feedback from 20 faculty members and 500 students in the fall semester of 2006. In the spring semester of 2007, the pilot was expanded to 50 faculty members and 1,200 students. A survey instrument was designed and integrated into each course to evaluate levels of student and faculty satisfaction with Moodle.

The goal of the LMS pilot was to determine if Moodle, the preferred choice in the initial evaluation, was appropriate for ISU. Specifically, pedagogical value, financial concerns, support issues, assessment criteria for accreditation, integration with the information technology services, and long-term viability were criteria considered. The results of the fall and spring pilots have been articulated through qualitative and quantitative measures and are demonstrated in this report. Based on the results of both pilots, Moodle was well received by ISU faculty.

The ITRC is prepared to immediately begin offering training and providing support for faculty interested in getting started with Moodle. WebCT courses can be migrated to Moodle starting in the summer of 2007 and can continue until the expiration of the WebCT license in July, 2008. Faculty may continue to use WebCT until that time, but should not be able to request new courses to be hosted within WebCT. WebCT training will no longer be offered, but migration support would continue until every course has been successfully migrated into Moodle. Starting in the fall of 2008, Moodle course offerings would be the primary web-based teaching and learning environment at ISU.

To address the ongoing needs of the university and take advantage of the ability to affect the functionality provided by Moodle, we recommend that a steering committee of faculty, staff, and students be formed to make recommendations about improving Moodle to the meet the needs of our campus community. With ongoing involvement from members of Idaho State University, we can make our learning management system an even more vital part of the high quality education available at this institution.

LMS Recommendation Report

During the past year, the Instructional Technology Resource Center (ITRC), with the cooperation of over 1,700 students and seventy faculty, has been evaluating learning management systems (LMS) to find a replacement for our current WebCT system. After conducting a thorough analysis of numerous alternative systems, the staff of the ITRC recommends that Idaho State University begin implementation of the Moodle LMS for the fall of 2007. While we recognize that many faculty members have significant time and effort invested in courses currently managed within WebCT, our analysis indicates that for most faculty members and students, Moodle is the best solution for our current and future needs. This document provides an overview of the motivation for changing to a new LMS, the evaluation of the various alternatives, and a description of concerns/issues that must be addressed as part of the implementation process.

Motivation for Change

In the fall semester of 2005, ISU was informed by WebCT that our current platform – WebCT CE 4.0 – would no longer be supported after July of 2007 (although they recently changed the "end support" date to July of 2008). In talking to other universities and WebCT personnel, it became apparent that WebCT CE 6.0 required significant changes for both users and support personnel.

To further complicate matters, soon after the version 4.0 support deadline was announced, Blackboard Corporation, which makes a competing LMS product, announced its acquisition of WebCT. This merger was finalized in April of 2006 and created additional concerns for product directions, pricing, and support requirements. Consequently, the issue of upgrading an existing platform became complicated by issues of choosing which product to implement – WebCT CE 6.0 or the latest Blackboard product. The consideration of a Blackboard option necessitated a review and evaluation process of our existing LMS needs and planning for future campus-wide requirements.

Alternatives Considered

WebCT was contacted to determine financial, support, and interface changes to migrate from CE 4.0 to CE 6.0. Other commercial venders (e.g., Blackboard, Angel, or D2L) had been recently evaluated over by the Instructional Technology Resource Center (ITRC). None of those other commercial alternatives has proven to be a viable option to WebCT when comparing price, usability, flexibility, and support.

However, recent developments in the open source [1]community have resulted in two viable alternatives: Sakai and Moodle. As a preliminary measure, ISU support staff from ITRC, ETS, and ITS communicated and visited with other universities implementing both products. San Francisco State University, Humboldt State University, Portland State University, and Indiana University provided useful information regarding our evaluations of Moodle and Sakai. Preliminary investigations led us to develop a multi-stage, broad-based comparative evaluation process of WebCT CE 6.0, Moodle, and Sakai.

Open source systems such as Sakai and Moodle offer unique advantages over proprietary systems such as WebCT and Blackboard. Because the source program code is available, open source applications are much more customizable than proprietary systems. Even if ISU does not choose to revise the code ourselves, there is a community of developers at other universities and corporations that add functionality to the systems and contribute those new modules back to the entire community

[1] Open source software is made available to the general public with either relaxed or non-existent intellectual property restrictions. This allows users to create user-generated software content through either incremental individual effort, or collaboration. (wikipedia.org)

for inclusion in the product. For very active open source communities, this results in a quickly evolving product. Also, open source solutions do not require license fees to use the product. While some have questioned the availability of technical support for open source products, active open source communities have been providing support for their products successfully for quite some time. For example, Apache, an open source web server solution, currently runs over 60% of all web sites in the world, and the community provides a high level of technical support.

Evaluation Process

After deciding to further investigate WebCT CE 6.0, Sakai, and Moodle, a multi-part evaluation process was created. First, all three alternatives were investigated with regards to:

- User (instructor and student) concerns and preferences
- Ability to support student, course, and program assessments
- Technical and support issues
- Financial considerations

Based on the results of the first evaluation phase, Moodle was selected for a pilot project to see how it performed in a production environment.

Initial Selection Process

The initial selection process was used to choose a single LMS for the pilot project. Details of this process can be found in Appendix I. The following categories were considered:

User Preferences

The first stage consisted of a series of focus group sessions that were held with students, support staff, and faculty members. Based on feedback from those sessions, Moodle was selected to be piloted in “live” courses.

The faculty focus groups, selected according to the percentage of WebCT usage in the various colleges, consisted of both intensive and non-intensive users of WebCT, along with faculty members that did not currently use our LMS. College Deans were also asked to suggest additional faculty members to be included in the focus groups. Ultimately, 23 instructors were included in the focus groups.

Focus groups were also conducted for students. Five students participated in these focus groups. They represented a variety of WebCT experience.

Both students and faculty members were given a demonstration of the three products and were later given access to explore each product on their own. They were then asked to share their opinions about pedagogical issues (e.g., functionality, ease of use, etc.). Both students and faculty preferred Moodle to the other two options.

Assessment Needs

The ISU Assessment Coordinator was also given an opportunity to investigate the three alternatives. When focusing on assessment needs and capabilities, he regarded Moodle as far better positioned to serve ISU's greatest common good over time.

Technical and Support Issues

ITRC staff investigated various technical and support issues, some of which were identified by faculty members during the focus groups. These included issues related to the migration of courses and content to the new system, support for a variety of platforms, browsers, etc., and ease of support by the staff. Overall, Moodle appeared to offer the most flexibility in addressing staff concerns.

Financial Considerations
The costs associated with the three LMS alternatives (WebCT 6.0, Sakai 2.0, and Moodle 1.5) are estimated for the first-year and third-year expenditures. These costs focus on new hardware, personnel, and license fees or software community support provisions. Moodle was deemed to be the least expensive option over time.

Pilot Project

Based on the results of the comparison among the three alternatives, Moodle was selected for the pilot project. The purpose of the pilot project was to allow students and faculty members to try out Moodle in a production environment so that we could be sure that it satisfied our needs. Fifteen to twenty faculty members volunteered to conduct their summer 2006 and/or fall 2006 courses using Moodle. Approximately 500 students were enrolled in the courses piloted using Moodle. Survey data was collected from both students and faculty regarding the usefulness of Moodle for online and hybrid (traditional and online components) courses. Based on the success of the fall pilot, the pilot was expanded and continued into the spring 2007 semester. This term, fifty faculty members and 1,200 students have been using Moodle. Data has now been collected from the spring pilot participants.

Results of Survey
A total of 242 of the 1,700 students completed the online survey, for a response rate of just over 14%. Thirty-six of the seventy faculty members completed the survey, for a response rate of 51%.

Generally, users responded favorably to Moodle (details of the survey results can be found in Appendix II and Appendix III). For example, 65% of the faculty members said they preferred using Moodle over other LMS systems, including WebCT, and 91% felt navigation was easy within Moodle. Seventy percent said they would use Moodle in another course. However, approximately 25% of the faculty members were dissatisfied with one or more of the tools (e.g., communication, assignments, etc.) within Moodle.

Recommendation

Given the positive assessment of Moodle during the extensive evaluation conducted over the past year, we strongly recommend that Moodle be chosen as the supported LMS for Idaho State University. While it is not universally favored by students and instructors, it is favored by a strong majority. Moodle's flexibility and configurability are likely to increase the number of courses using our LMS versus our existing WebCT system. As an open source system, ISU has the ability to determine or strongly influence the future functionality of the product. Because Moodle has no license fees, ISU can either count that money as savings or redirect those funds into Moodle development, thereby creating an even more valuable system for us. Finally, Moodle has garnered a significant amount of support within the higher education community, and corporations are beginning to use it as well. This has led to a strong community of developers, which ensures the viability of the product in the future.

Issues and Concerns

While faculty responses to Moodle were generally favorable, we must note that there are some that feel strongly that WebCT CE 6.0 would be a better choice. This is particularly true among some of the faculty in the Kasiska College of Health Professions, where several completely online programs exist. There programs have invested extensive time and effort into learning to use WebCT effectively. They have built important parts of their programs around specific WebCT functionality, and do so in a manner that provides high quality student learning experiences. While we do not feel this functionality will be lost, the implementation of Moodle may require these programs to implement new ways of accomplishing the same tasks. The staff of the ITRC is committed to assisting these programs to gain the same level of expertise and functionality in Moodle as they currently have in WebCT.

Some of the problems identified by faculty in the pilot can be addressed through a combination of "add-ins" already available in Moodle (but not currently implemented in our installed instance) and additional faculty training. For example, managing email communication within Moodle was deemed unsatisfactory by some of the faculty members. However, there are at least two options contributed to the Moodle open source community that can greatly improve the email functionality. Other problems, such as the lack of gradebook functionality, are also at least partially addressed by contributed modules we have not yet implemented. To address additional and future needs, we recommend a task force of faculty, staff, and students be identified to help make recommendations about improving Moodle to the meet the needs of our campus community. This task force will meet each month and will determine priority of changes that need to be addressed in Moodle. As a start to that process, we have included in Appendix IV a list of issues identified by the Kasiska College of Health Professions that should be addressed (note that solutions to some of these problems have already been identified).

Moodle, like any LMS, is not the perfect solution for our institution, but provides many more options and opportunities to better develop a solution that meets the needs of ISU. The success of Moodle will be defined by our own dedication to course redesign and new pedagogical realignment with web-based course initiatives. As demonstrated in this report, Moodle can logically be identified as a long-tem solution for ISU.

Implementation Plan

Scheduling will be critical to making the migration from WebCT to Moodle a success. The ITRC will immediately begin to offer training and providing support for faculty interested in getting started with Moodle. WebCT courses will be migrated into Moodle starting in the summer semester of 2007 and will continue until the expiration of the WebCT license in July, 2008. Faculty may continue to use WebCT, but will not be able to request new courses in WebCT. WebCT training will no longer be offered, but migration support will continue until every course has been successfully migrated into Moodle. Starting in the fall of 2008, faculty and students will experience Moodle in all their courses offerings with web-based teaching and learning environments.

Appendix I

LMS Focus Group Report

LMS Focus Group Report

May 11, 2006

Instructional Technology Resource Center
Idaho State University

LMS Focus Group Report

Summary:

The learning management systems (LMS) Focus Group Report evaluates feedback by Idaho State University (ISU) faculty members, students, support staff, and assessment officer review of WebCT 6.0, Sakai 2.0, and Moodle 1.5 LMS software packages. The ISU campus community currently utilizes WebCT 4.0, which will no longer be supported after July of 2007, to deliver course materials and activities via the Internet. A typical upgrade path would be to upgrade to WebCT 6.0, but that process has been identified as a larger shift in support and resources than previously required for WebCT version upgrades. The goal of this study is to determine if better LMS alternatives exist that can demonstrate increased pedagogical value, support financial concerns, address support issues, meet appropriate assessment criteria for accreditation, integrate with the information technology services on campus, and offer dependable long-term solutions.

Background:

ISU has been utilizing WebCT since the fall semester of 1997 when the product was still in beta release. We started paying WebCT for their support and license in 1998 for $500/year and are currently paying $35,700/year with an expected increase of 5% annually (based on current licensing policies). Currently, ISU supports over 600 WebCT courses a semester with an annual increase of about 50 courses in the last two years. Having a significant influence on distance learning and the ways in which faculty teach at ISU, the University requires a close investigation of LMS options to begin long-term planning and to expand the level of our current course support and offerings.

In the fall semester of 2005, ISU was informed by WebCT that our current platform – WebCT CE 4.0 – would no longer be supported after July of 2007. The new version (WebCT CE 6.0) was identified as requiring a significant shift in personnel and equipment support and resources. Soon after the version 4.0 “end of life” and support deadline was announced, Blackboard Corporation, which makes a competing LMS product, announced its acquisition of WebCT. This merger was finalized in April of 2006 and created additional concerns for product directions, pricing, and support requirements. Consequently, the issue of upgrading an existing platform became complicated by issues of upgrading to which product – WebCT CE 6.0 or, in view of this corporate acquisition, moving to a Blackboard product? The consideration of a Blackboard option necessitated a review and evaluation process of our existing LMS needs and planning for future campus-wide requirements and requests.

The first step in evaluating our LMS requirements was to determine our choices in either migrating to the new version of WebCT or to identify another product that was comparable to the current platform. Data was collected from WebCT to determine costs to migrate from CE 4.0 to CE 6.0. Other commercial venders (e.g., Blackboard, Angel, or D2L) have been evaluated over the previous two years internally by the Instructional Technology Resource Center (ITRC). None of those commercial alternatives has proven to be a viable option when comparing price, usability, and support. Changing to another commercial product would offer another layer of challenges that make it difficult to discontinue WebCT. Additionally, we have

enjoyed a productive relationship with WebCT, and it does not appear advantageous to consider other commercial vendors.

After surveying the major additional alternatives, Sakai and Moodle emerged as the two main Open Source LMS solutions worth being evaluated against WebCT. Open source LMS products evolve through community cooperation and development. Such communities are composed of individual programmers and educators who freely develop and share product ideas (this is a viable approach to product development and support – for example, Open Source Apache web servers currently hold a 63% market share). Both Moodle and Sakai offer cost effective solutions that can be comparable to our current WebCT LMS, and in some cases can offer more flexibility with teaching and learning tools. As part of evaluating Sakai and Moodle, ISU support staff from ITRC, ETS, and ITS communicated and visited with other Universities implementing both products. San Francisco State University, Humboldt State University, Portland State University, and Indiana University provided useful information regarding our evaluations of Moodle and Sakai.

LMS	Background
WebCT CE 6.0	WebCT began as a project by a University of British Columbia professor Murray Goldberg as part of a grant project to study the effects of online teaching on learning. Murray founded WebCT in 1997 at UBC, and delivered it as a commercial product at that time. In 1999 the company was acquired by Universal Learning Technology (ULT) and combined company was renamed WebCT, and headquarters moved to Lynnfield, Massachusetts. WebCT is a privately held company backed by a group of investors, which include CMGI@Ventures, JPMorgan Partners, SCT, and Thomson Corporation.
Sakai 2.0	The Sakai Project is a coordinated higher education open source community project launched in 2003. It builds on previous work done by Stanford, Michigan, Indiana and other partners, and is built within the uPortal framework. The project has been funded through 2005 by the Mellon foundation as well as contributions from the Hewlett foundation and the core partners themselves. The project has also created the Sakai Educational Partner's Program (SEPP), a for-fee community that is open to educational institutions and for which they receive early access to code releases, documentation, project staff and exchange of partner tools.
Moodle 1.5	Moodle.org is an open source community launched in 2001 that has grown out of a PhD research project by Martin Dougiamas. Version 1.0 was released on August 20, 2002. Moodle.com is a company launched in 2003 that sponsors Moodle development and provides commercial support, hosting, custom development, and consulting. The Moodle Partners are a network of companies that work with Moodle.com to provide services around the world.

Table 1: LMS Backgound – Reference Citation: EduTools. (2006). CMS: Product Comparison System. Retrieved May 06, 2006 from http://www.edutools.info/compare.jsp?pj=8&i=263,276,299,358,366,386,387

The ITRC utilized two methods in collecting data to evaluate the three LMS products. The first instrument initiated during the focus groups was created by the ITRC staff to collect reflective data during the initiation of the focus group. This tool provided information about perceived likes and dislikes of the current system and the effects of a new LMS. In addition, the reflective process focused on administration, content, assessment, and communication interfaces of WebCT 6.0, Sakai 2.0, and Moodle 1.5. The second instrument was borrowed from Chico State University, where it had been utilized in their evaluation of several LMS systems. Their tool was slightly modified to match our local needs and to focus on more specific stakeholders affected by the LMS decision-making process.

Pedagogical Value:

In selecting a new LMS, pedagogical issues focused around design, delivery, and interface of each product. The ITRC encouraged participation of the faculty and student population, because the users of the product needed to have a significant voice in this evaluation process in order to make it meaningful and reflective of our campus community and instructional technology needs. Based on current usage of WebCT, three faculty groups of WebCT users were selected and one group of non-users was selected. Faculty members were selected according to the percentage of WebCT usage in the various colleges (Deans were also asked to submit additional faculty names for this process, as desired), and students were randomly selected by the ISU Student Senate.

<u>Students</u>
The five students that participated in the focus group had an opportunity to engage with all three products (i.e., WebCT 6.0, Sakai 2.0, and Moodle 1.5) with a focus on specific instructional tools based on student learning needs. The students demonstrated various levels of WebCT knowledge, from low- to high-level usage and experience. Their Rubric focused on three areas of collecting and reporting student learning needs:

1. Tool Set/Features List (compared with current)
    a. Login
    b. Content
    c. Communication
    d. Assessment
    e. Gradebook

2. Ease of use interface (compared with current)
    a. Intuitiveness
    b. Accessibility
    c. Interface consistency
    d. Number of clicks
    e. Searching

3. Technological issues related to learning
    a. Cross-platform
    b. help feature (robustness)
    c. browser support – plugins
    d. Three faculty groups of WebCT users

Each of the areas of evaluation was rated using a four-level Likert scale (Doesn't Meet, Meets, Exceeds, and Superior). An explanation of each area was demonstrated by the student focus group in the data presented in Chart 1. Students found Moodle to have advantages in supporting their learning needs. The detailed data analysis from the student group is available in the Appendix IA.

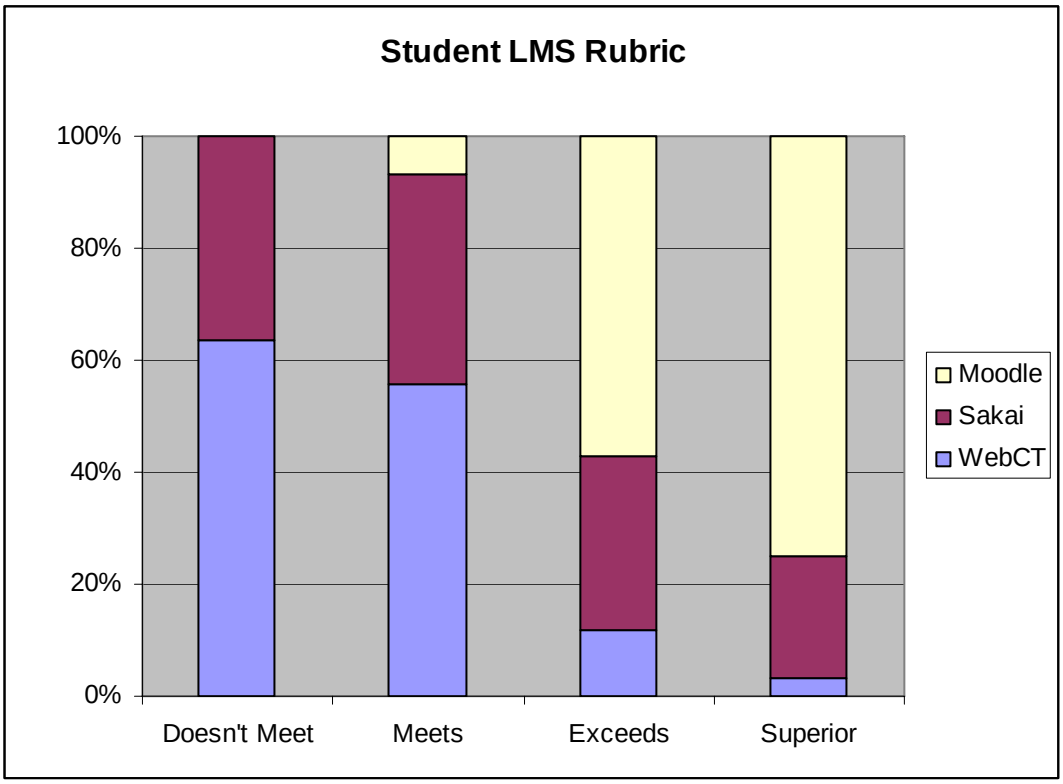


Chart 1: Student LMS Rubric Results

The student reflection process provided some group feedback related to student learning needs in utilizing an LMS. Students have concerns with the current WebCT technology with icons not matching, making the learning process very confusing, and they expressed a desire for more faculty training with the technology. The students specifically requested that any new LMS include quick access to grades, improved assessment instruments, and an interface or visual approach and display that will help differentiate file types. In addition, students would like their instructors to take advantage of more online resources. Their overall rating of all three products concluded with Moodle unanimously ranked first by all student participants.

<u>Faculty</u>

The 23 faculty participating in their four focus groups also had the opportunity to engage and reflect on all three products (WebCT 6.0, Sakai 2.0, and Moodle 1.5) and identified the specific assessment tools based on faculty teaching needs. Their rubric focused on six areas of collecting and reporting on faculty teaching needs:

1. Tool Set/Features List (compared with current)
    a. Completeness (tool sets)
    b. Content Creation
    c. Content Management
    d. Communication
    e. Announcements
    f. Collaboration
    g. Student Presentations
    h. Assessment
    i. Gradebook

2. Ease of use interface (compared with current)
    a. Intuitiveness
    b. Interface consistency (buttons, labels, breadcrumbs)
    c. Number of clicks
    d. Content Creation
    e. Content management
    f. Assessment

3. E-portfolio – options
    a. current support (course level)

4. Blogs/Wiki – options
    a. current support (course level)

5. Pedagogical Flexibility
    a. Communication
    b. Content
    c. Assessment
    d. Announcements

6. Technological issues
    a. cross-platform (Windows, Mac, etc.)
    b. help feature (robustness)
    c. browser support – plugins

As with the students, each of the areas of evaluation was rated using a four-level Likert scale (Doesn't Meet, Meets, Exceeds, and Superior). The rubric results of each of the areas were completed by 16 of 23 faculty members and are illustrated in Chart 2. Detailed data from each faculty focus group is available in the Appendix IIA.

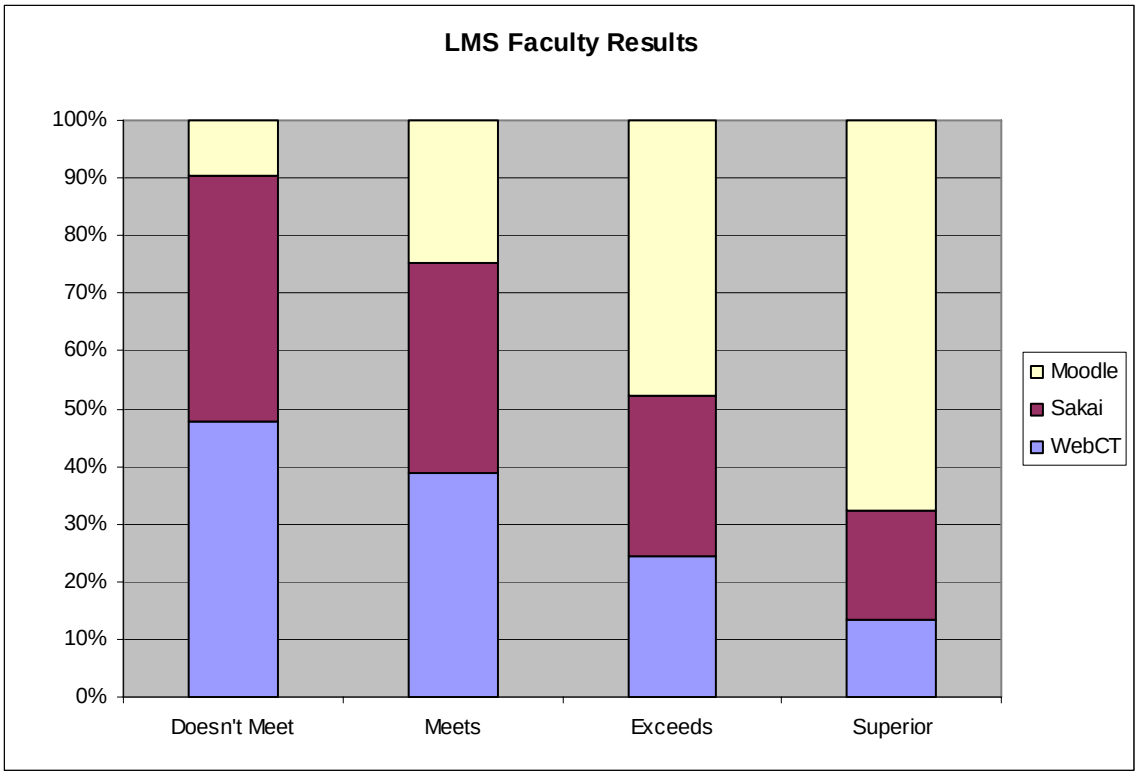
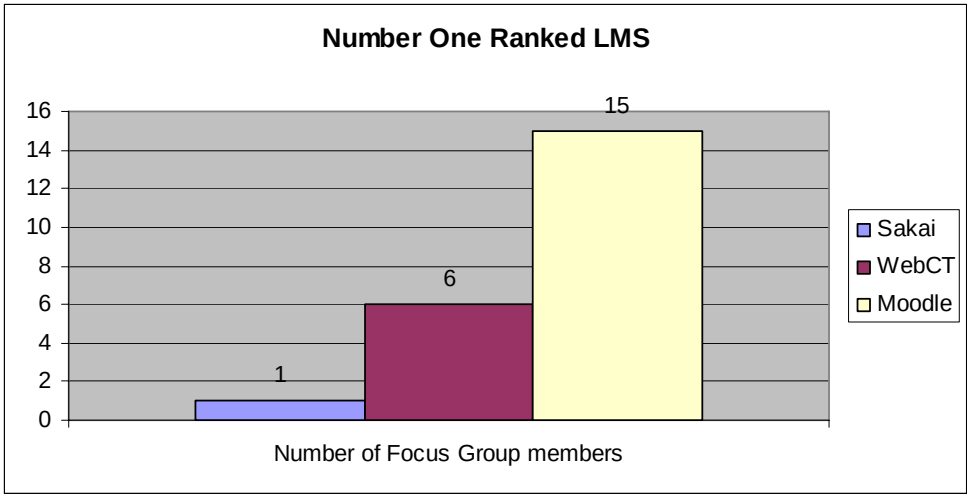


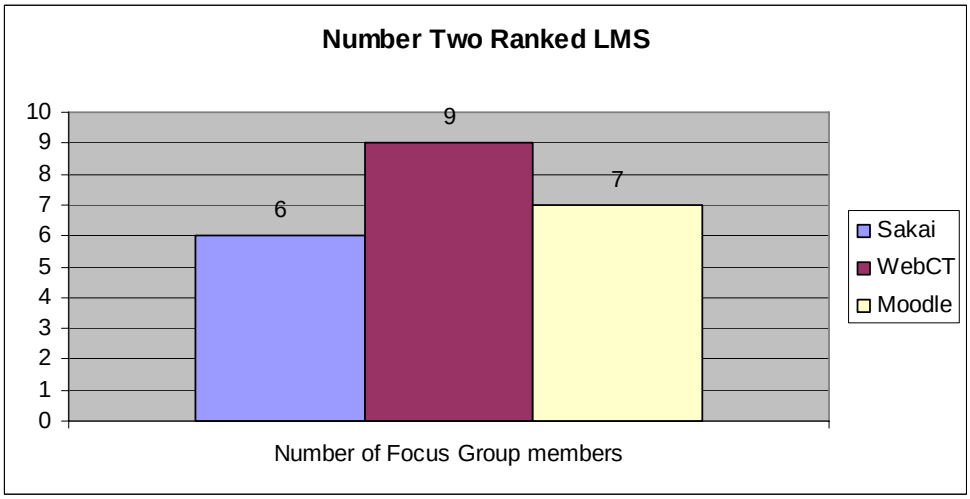
Chart 1: Faculty LMS Rubric Results

The faculty reflection process, involving a series of open-ended questions, provided group feedback related to faculty teaching needs in utilizing an LMS. The 23 faculty members that participated in the focus groups have specific concerns about:

- time needed to transfer information from the current application into a new application,
- the time needed to learn the new product,
- students' ability to navigate the learning environment, and
- the level of support provided by the ITRC.

A number of faculty initially indicated that WebCT technology is more familiar and would provide an easier transition, but the majority felt the Moodle LMS would be easiest to learn if something other than WebCT were selected. Most faculty members agreed that Moodle was a favorable option if it provided the same level of flexibility and instructional application as the current version of WebCT. The majority of the faculty participants agreed that Sakai was user-friendly, but did not offer the same level functionality in the assessment, communication, and content tools as its two competitors in this process. Faculty consistently regarded Moodle as having the most potential; they also observed that it appeared to be a better teaching and learning tool then the other products. With respect to the prospect of having to change the LMS platform again should Blackboard's acquisition of WebCT soon result in a single, Blackboard-based product, faculty members were concerned about adopting one product now yet having to move again in a couple of years. Faculty preferred and requested a dependable, long-term solution. The overall faculty rankings of the three products are reported in a series of bar charts by 22 of 23 faculty that participated in the ranking, demonstrating rankings by first, second, and third choices, as displayed in Chart 3 below.





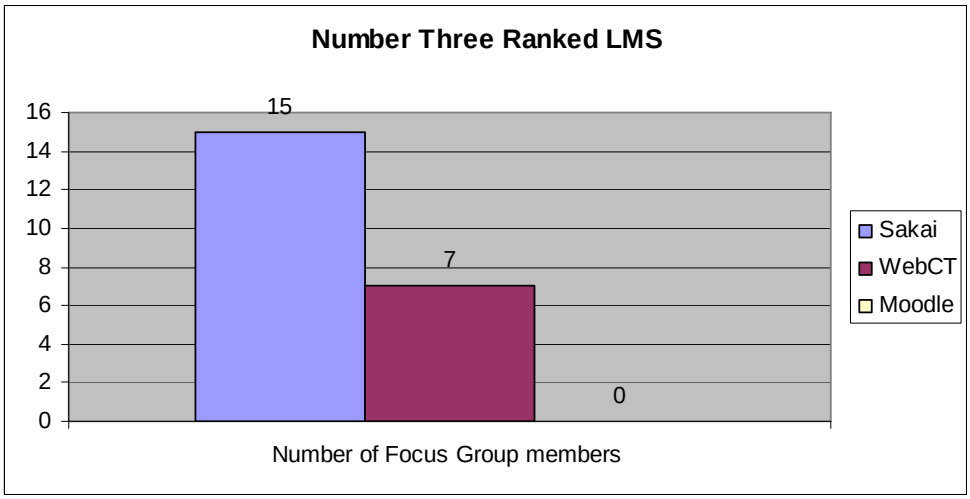


Chart 3: Student LMS Rankings

Assessment Criteria:

The ISU Assessment Coordinator also had an opportunity to engage with all three products (WebCT 6.0, Sakai 2.0, and Moodle 1.5) and identified the specific assessment tools based on ISU accreditation needs. The Rubric focuses on five areas of collecting and reporting student learning:

1. Solid course-level assessment
2. Potential for program level assessment (WASC)
3. Reporting capabilities
    a. export and aggregate data across courses/programs
4. Potential to support Student Evaluation of Teaching
5. Potential to support departmental periodic reviews
    a. content management/sharing (standards, evidence)

Each of the areas of evaluation was rated according to a four-level Likert scale (Doesn't Meet, Meets, Exceeds, and Superior). An explanation of each area was demonstrated by the assessment officer. Overall ratings of all three products are reported in Chart 4, and the data from each area evaluated is available in the Appendix IIIA.

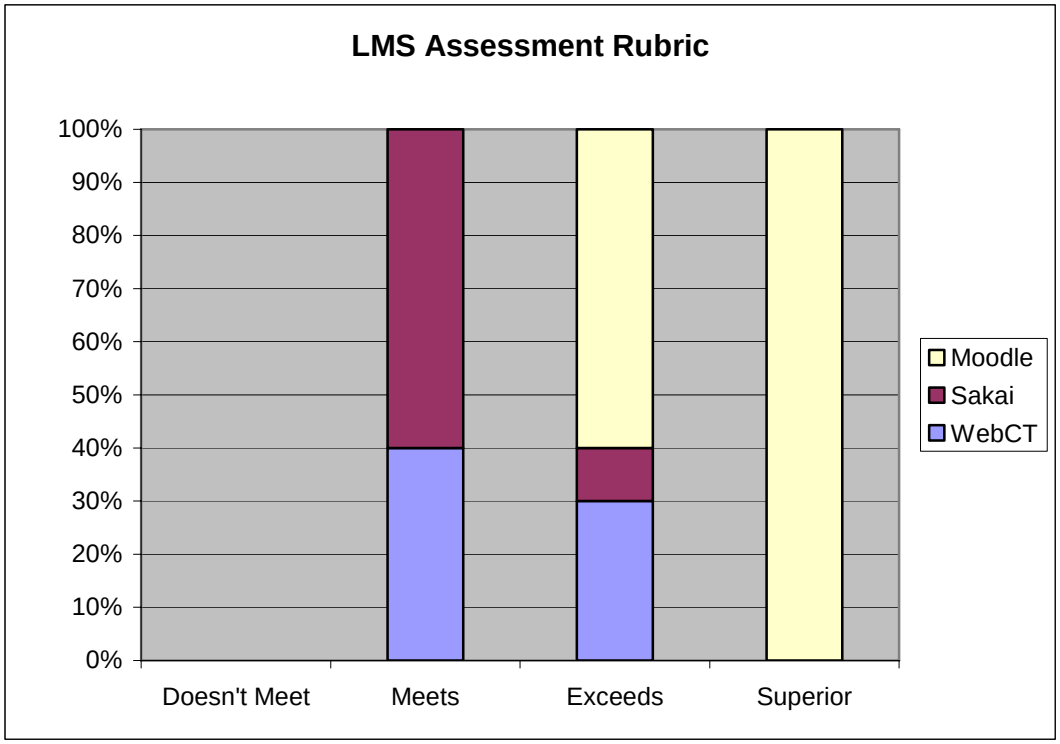


Chart 4: LMS Assessment Rubric Results

The ISU Assessment Coordinator's reflection process provided some feedback related to University assessment needs in utilizing an LMS. When focusing on assessment needs and capabilities, he regarded Moodle as, without question, far better positioned to serve ISU's greatest common good over time in much stronger and more productive ways than the other two options. Overall, the assessment officer felt there could be some sound reasons to go with WebCT 6 in the short term, but that he was, "afraid that such a decision would leave us

wondering in a couple of years why in the world we didn't go with Moodle to do the assessment activities that are absent in our current LMS."

Support Issues:

The Instructional Technology Resource Center (ITRC) support staff had an opportunity to engage with all three products (WebCT 6.0, Sakai 2.0, and Moodle 1.5) and identified the specific assessment tools based on support issues involved in supporting faculty with an LMS. The Rubric focuses on seven areas of collecting and reporting faculty and student support needs:

1. Migration of courses and content
    a. Tools/utilities/process
    b. Ease for faculty
    c. Ease for support staff
    d. Response from reference sites
    e. Migration of content out of product

2. Training and support for staff
    a. "Train the trainer" available onsite/online
    b. Ease of retraining (5 days)
    c. Ease of new training development (out of the box)

3. Training and support for faculty/departments
    a. Basic Retraining (8 hours)
    b. Introduction (12 hours)
    c. Advanced Training (30 hours)

4. Accessibility (508)

5. Platforms, browsers, plug-ins (Mac, PC)

6. Ease of use for staff
    a. course design
    b. application administration
    c. application support
    d. distributed administration

7. Single-sign-on access
    a. library systems/subscription services
    b. other campus systems

Each of the areas of evaluation was rated using a four-level Likert scale (Doesn't Meet, Meets, Exceeds, and Superior). An explanation of each area was demonstrated by the staff. The detailed data from each is available in Appendix IVA.

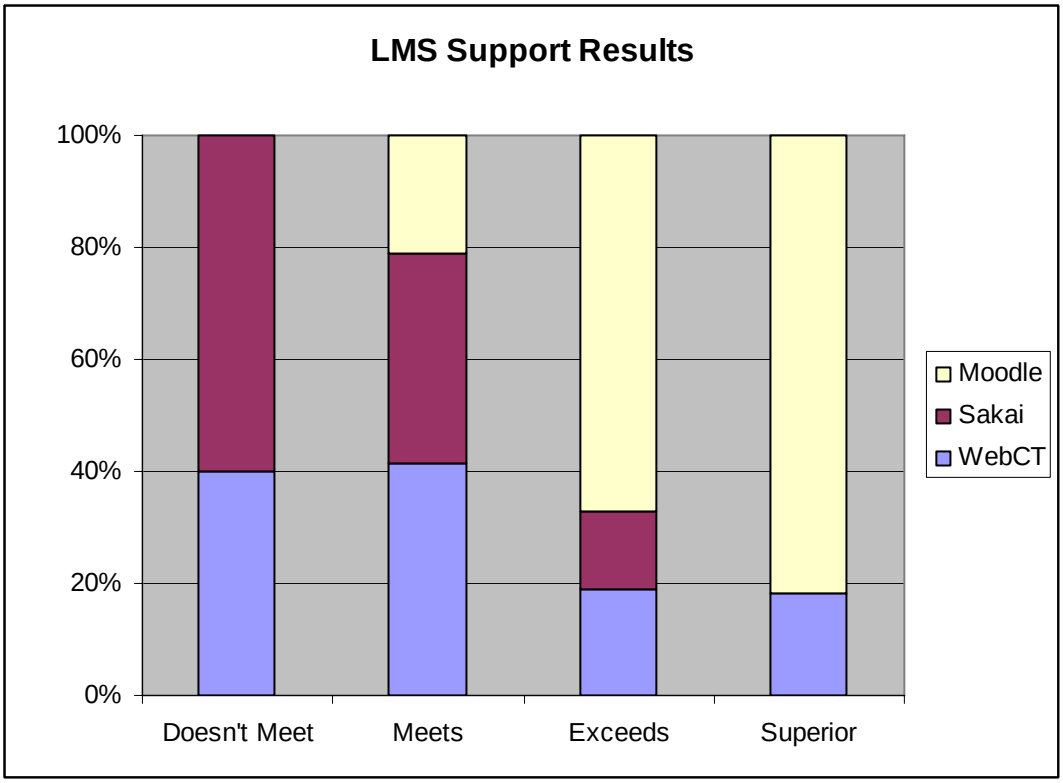


Chart 5: LMS Support Rubric Results

The ITRC support staff reflection process provided some feedback related to University faculty support needs in utilizing an LMS. Reflections from the staff were collected both during the student and faculty focus groups and during informal review of each LMS product. The process of converting courses and retraining faculty were the staff members' top concerns with the each product. The staff members were concerned that any new LMS include more intuitive help files, better browser support, and more flexibility when modifying or interfacing with administration tools that support faculty and students. Overall, Moodle appeared to offer the most flexibility in addressing the support staff concerns.

Financial Considerations:

The costs associated with the three LMS alternatives (WebCT 6.0, Sakai 2.0, and Moodle 1.5) are estimated for the first-year and third-year expenditures. These costs focus on new hardware, personnel, and license fees or software community support provisions. WebCT and Sakai start-up fees are very comparable, but Moodle demonstrated a need for only half of that amount at outset. Moodle also would have a slight advantage over Sakai in the third year of implementation, and at that stage would require almost half the continuing financial support needed to maintain WebCT. The evaluation of expenditures for each product is demonstrated in Charts 6 and Chart 7. Appendix VA provides the cost breakdown for each product and includes criteria for budget requirements.

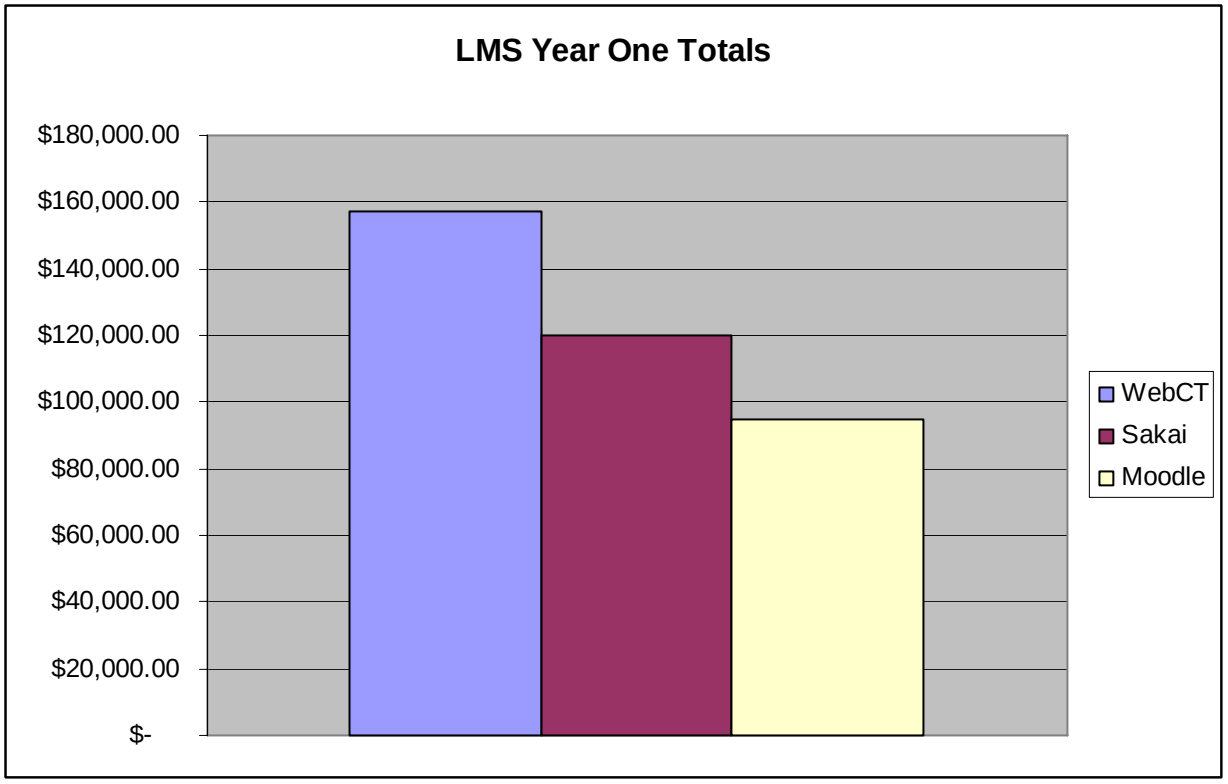


Chart 6: LMS Year-One Totals

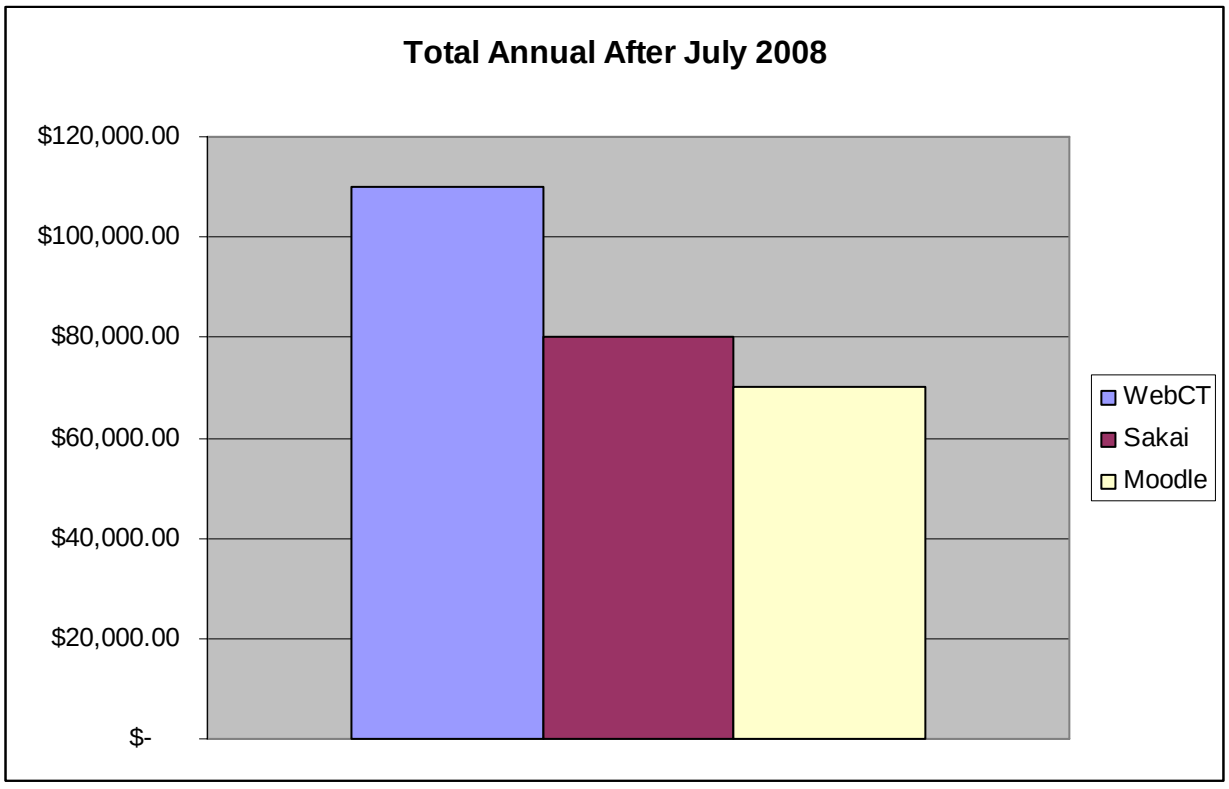


Chart 7: Total Annual after July 2008

Campus Information Technology Services (ITS):

The information technologies efforts will be evaluated by integration and support services offered by the University. The areas of focus will be on student information, server operating systems, database software requirements, hardware specification, and potential integration with an enterprise system.

Student information can be connected to the LDAP with all three LMS products, providing ready integration with our current and likely future enterprise system. The limitation of all three is the time and resources needed to develop an interface that will allow manual or automatic student data population and course creation and archiving.

The database software requirements of each product offer standard commercial database support. WebCT 6.0 will require Microsoft SQL or Oracle. Moodle and Sakai offer additional flexibility with other databases and data tables from other applications (e.g., generic MySQL). See Table 2 for more specific details for database requirements for each LMS.

LMS	Database Support
WebCT CE 6.0	For Intel (Windows and Linux) configurations, the system requires Microsoft Windows 2003 (SP1) and Microsoft SQL Server 2000 SP3** (Standard or Enterprise Edition) or Red Hat Enterprise 3.0 Linux ES (Update 4) and Oracle 9.2.0.6 (Standard or Enterprise. For Sun Sparc Solaris configurations, the system requires Solaris 9 and Oracle 9.2.0.6 (Standard or Enterprise Edition).
Sakai 2.0	The system supports Oracle 9i or later, or MySQL 4.1+. The system requires only one database and can coexist with tables from other applications.
Moodle 1.5	The system supports either MySQL or PostgreSQL databases. The system requires only one database and can coexist with tables from other applications.

Table 1: LMS Database Support – Reference Citation: EduTools. (2006). CMS: Product Comparison System. Retrieved May 06, 2006 from http://www.edutools.info/compare.jsp?pj=8&i=263,276,299,358,366,386,387

The server operating system and hardware technology vary with each product. Moodle and Sakai have the most flexibility, to include a variety of options with OS and hardware, whereas WebCT requires more specific equipment configurations. The technology hardware and software requirements are demonstrated in Table 3.

LMS	Server Hardware and Software Support
WebCT CE 6.0	The system is a four-tier architecture within the J2EE Framework that uses the BEA WebLogic Enterprise Server, which is included in the software license. Unix Server – The software is available for Red Hat Enterprise 3.0 Linux ES (Update 4) and Solaris 9 Windows Server – The software is available for Windows 2003 (SP1)
Sakai 2.0	The software is intended to work on a wide range of hardware and operating systems that support Java. The software requires Tomcat 5.5.9 or later, and the Java 2 SDK. Unix Server – The software is deployable on any Unix variant with Java support, but Linux and Apple OS X are the typical environments Suggested environment would be an Intel-based Linux with 4GB RAM. Windows Server – The software is likely deployable on any Windows variant with Java support, but XP is the typical environments used by the developers. Suggested typical production environment would be a Windows Server 2003 with 4GB RAM.
Moodle 1.5	The software requires PHP 4.1.0 or later, MySQL(or PostgreSQL), and a web server. The software was developed using the Apache web server. The software includes: administration reports through a web browser, course archive and restore, installation setup wizard that includes database creation, backup and archiving, tools to backup and purge either course content or student data for individual courses and groups, rotated logs, notification services, a display of the last sessions in the system that can be filtered by either IP address or date, site configuration. Unix Server – The software is available for most variants of Linux or Unix. Windows Server – The software is available for a variety of Windows web servers.

Table 3: LMS Server Hardware and Software Support – Reference Citation: EduTools. (2006). CMS: Product Comparison System. Retrieved May 06, 2006 from http://www.edutools.info/compare.jsp?pj=8&i=263,276,299,358,366,386,387

The University is currently working on an ERP to begin the selection of an Enterprise System to help distribute and report institutional data through a common system. The LMS products discussed in this report offer integration in most systems with the LDAP and API capabilities. Universities currently utilizing commercial enterprise systems have solutions in place for all three products.

Recommendation:

Based on the data collected from this study, the ITRC proposes a full-scale evaluation of Moodle. In the summer 2006 and fall 2006 semesters, 15-20 faculty members will receive ITRC support with instructional design and technology production to begin prototyping their courses in Moodle. LMS survey instruments will be designed to integrate with each course to evaluate levels of student and faculty success. In some cases, a control group will be utilized to compare criteria of those working with the same course in WebCT.

The most current Moodle application will be installed on a small production server to provide prototyping courses with an environment to begin this evaluation process. The server will be housed in Information Technology Services; ITS will provide support for the operating system, hardware, and telecommunications of this system. The ITRC will use its limited resources to install and manage the Moodle software during the prototyping stage. A request has been made to create an LMS Administrator / Database Administrator position to support future efforts LMS mission requirements (whether with respect to final adoption of Moodle or WebCT).

This process will involve reports from faculty and students enlisted in the evaluation study. The future direction of web-based, instructional technology resources provided by our chosen Learning Management System will depend on the success (or lack thereof) while prototyping courses in summer and fall semesters. The information thereby collected will provide the University with the appropriate evaluation information needed to invest in a future LMS. At the conclusion of this evaluation following fall term, 2006, the ITRC will report on the prototyping process and recommend whether ISU should (1) move all current WebCT courses to the Moodle LMS, or (2) continue our investment in WebCT.

Appendix IA

Student Best Fit Rubric Results

LMS Strategic Review: ISU Student Best Fit Rubric

Rubric adopted from CHICO

Areas of Consideration	Moodle: Doesn't Meet	Moodle: Meets	Moodle: Exceeds	Moodle: Superior	Student 1 Notes/Follow-up	Student 2 Notes/Follow-up	Student 3 Notes/Follow-up	Student 4 Notes/Follow-up	Student 5 Notes/Follow-up
Learning Requirments									
1. Tool Set/Features List (compared with current)								cost of Sakai vs moodle?	
- Login		3	1	1					
- Content		1	2	2	more options in text editing		spell check!	spell check a plus	
- Communication			2	3	calendering tools very good		clalendar plus	like email better, calendar fea	Great Calendar, email lists
- Announcements			1	4	great tools				
- Collaboration			5						peer review , case studies
- Assessment			3	2	flexible in grading				testing options awesome
- e-portfolio					***N/A***	***N/A***	***N/A-- interested***	***N/A***	***N/A***
- Grade Book			2	3					best grading options
2. Ease of use interface (compared with current)									
- Intuitiveness			4	1	back buttons work		back button works	can use back button	OK back button
- Accessibility			4	1	No Java, frames				
- Interface consistency			4	1	great organization, busy				
- Number of clicks			5						
- Searching		1	3	1					
3. Technological issues related to learning									
- cross-platform		2	2	1					Speed
- help feature (robustness)			2	3					
- browser support - plugins			4	1	not required				
	0	7	44	24					

Appendix IA

LMS Strategic Review: ISU Student Best Fit Rubric					Student 1	Student 2	Student 3	Student 4	Student 5
Rubric adopted from CHICO	Sakai								
Areas of Consideration	Doesn't Meet	Meets	Exceeds	Superior	**Notes/Follow-up**	**Notes/Follow-up**	**Notes/Follow-up**	**Notes/Follow-up**	**Notes/Follow-up**
Learning Requirments									
1. Tool Set/Features List (compared with current)									
- Login		4	1						who's online… cool
- Content	1	1	2	1			no spell check?		no spell checker, back button
- Communication	1		2	2				popups/email	teacher's email/class email
- Announcements		1	3	1				like announcment features	all on one page
- Collaboration		3	1	1	WOW, Wiki and HTML editer				RSS, calendar, wikis
- Assessment		5			Audio submissions - quiz				why all three assignments?
- e-portfolio					***N/A***	***N/A***	***N/A --very interested***	***N/A***	***N/A***
- Grade Book		2	2						
2. Ease of use interface (compared with current)									
- Intuitiveness	1	1	2	1					
- Accessibility		1	3	1					
- Interface consistency		3	2						
- Number of clicks		2	3						
- Searching		3	2						
3. Technological issues related to learning									
- cross-platform		4	1		Back button not working				
- help feature (robustness)	1	4							
- browser support - plugins		5							9 on a scale of 1-10
	4	39	24	7					

LMS Strategic Review: ISU Student Best Fit Rubric

Rubric adopted from CHICO	WebCT				Student 1	Student 2	Student 3	Student 4	Student 5
Areas of Consideration	Doesn't Meet	Meets	Exceeds	Superior	**Notes/Follow-up**	**Notes/Follow-up**	**Notes/Follow-up**	**Notes/Follow-up**	**Notes/Follow-up**
Learning Requirments									
1. Tool Set/Features List (compared with current)									
- Login		3	2		who's online!				ok, updated
- Content		5			personal storage			great personal storage	
- Communication		4		1	Wiki?		no change in email, who's on	email	
- Announcements		4	1						
- Collaboration	1	3	1						
- Assessment		3	2						
- e-portfolio					***N/A***	***N/A***	***N/A -- interested in portfoli***	***N/A***	***N/A***
- Grade Book		5							
2. Ease of use interface (compared with current)									
- Intuitiveness	1	3	1		back button - broken				
- Accessibility	1	4							
- Interface consistency		5			menu bar - poor design				
- Number of clicks	1	4							
- Searching	1	3	1						
3. Technological issues related to learning									
- cross-platform	1	4			frames				
- help feature (robustness)		4	1						
- browser support - plugins	1	4			poor -- very dependent				
	7	58	9	1					

Appendix IA

	Sakai	WebCT	Moodle
Student 1	3	2	1
Student 2	2	3	1
Student 3	2	3	1
Student 4	2	3	1
Student 5	2	3	1

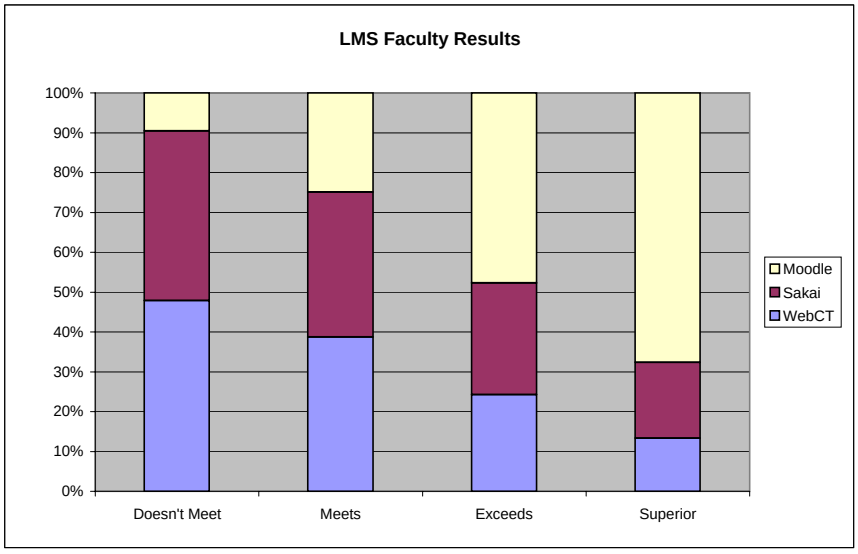
Staff Notes
student concerns - quick access to grades
something new should be improved
want menu and icons to match - very confusing
instructrors need additional training in using LMS
Not being able ot identify file types
most important tools - email, grades, and assignments

Appendix IIA

Faculty Best Fit Rubric and Reflective Instrument Results

Appendix IIA

LMS Strategic Review: ISU FACULTY Best Fit Rubric						
based on CHICO rubric	WebCT					
Areas of Consideration	Doesn't Meet	Meets	Exceeds	Superior	**Notes/Follow-up**	
Teaching and Learning						
1. Tool Set/Features List (compared with current)						
- Completeness (tool sets)	1	8	6	2		17
- Content Creation		11	6			17
- Content Management		12	5			17
- Communication	1	10	5	1		17
- Announcements	1	11	4	1		17
- Collaboration	3	12	2			17
- Student Presentations	2	12	3			17
- Assessment	1	10	4	2		17
- Grade Book	2	7	5	3		17
2. Ease of use interface (compared with current)						0
- Intuitiveness	3	9	5			17
- Interface consistency (buttons, labels, breadcrumbs)	1	9	7			17
- Number of clicks	6	6	5			17
- Content Creation		13	4			17
- Content Management	1	12	4			17
- Assessment	2	11	3	1		17
3. E-portfolio - options						0
- current support (course level)	1	15	1			17
4. Blogs/Wiki - options						0
- current support (course level)	1	14	2			17
5. Pedagogical Flexibility						0
- Communication	1	11	4	1		17
- Content	1	10	5	1		17
- Assessment	2	8	6	1		17
- Announcements		13	3	1		17
6. Technological issues						0
- cross-platform (Windows, Mac, etc.)	5	12				17
- help feature (robustness)	5	11	1			17
- browser support - plugins	5	11	1			17
- RSS linking					N/A	0
Totals:	45	258	91	14		



Appendix IIA

LMS Strategic Review: ISU FACULTY Best Fit Rubric						
based on CHICO rubric	Moodle					
Areas of Consideration	Doesn't Meet	Meets	Exceeds	Superior	**Notes/Follow-up**	
Teaching and Learning						
1. Tool Set/Features List (compared with current)						
- Completeness (tool sets)		4	12	1		17
- Content Creation		6	8	3		17
- Content Management	1	4	10	2		17
- Communication	1	6	9	1		17
- Announcements		5	8	4		17
- Collaboration		7	6	4		17
- Student Presentations		9	7	1		17
- Assessment	1	6	6	4		17
- Grade Book	1	9	6	1		17
2. Ease of use interface (compared with current)						0
- Intuitiveness		6	7	4		17
- Interface consistency (buttons, labels, breadcrumbs)		4	9	4		17
- Number of clicks		6	7	4		17
- Content Creation		6	9	2		17
- Content Management		6	7	4		17
- Assessment	1	5	7	4		17
3. E-portfolio - options						0
- current support (course level)	1	15	1			17
3. Blogs/Wiki - options						0
- current support (course level)		11	5	1		17
4. Pedagogical Flexibility						0
- Communication	1	5	9	2		17
- Content		4	10	3		17
- Assessment	1	4	9	3		17
- Announcements		5	6	6		17
5. Technological issues						0
- cross-platform (Windows, Mac, etc.)	1	6	7	3		17
- help feature (robustness)		8	3	6		17
- browser support - plugins		10	5	2		17
- RSS linking		9	6	2		17
Total:	9	166	179	71		

Appendix IIA

LMS Strategic Review: ISU FACULTY Best Fit Rubric						
based on CHICO rubric	Sakai					
Areas of Consideration	Doesn't Meet	Meets	Exceeds	Superior	**Notes/Follow-up**	
Teaching and Learning						
1. Tool Set/Features List (compared with current)						
- Completeness (tool sets)	5	7	3	2		17
- Content Creation	1	10	6			17
- Content Management	3	8	6			17
- Communication	3	10	4			17
- Announcements	1	10	5	1		17
- Collaboration	1	10	6			17
- Student Presentations	2	11	4			17
- Assessment	2	11	4			17
- Grade Book	3	10	4			17
2. Ease of use interface (compared with current)						0
- Intuitiveness	5	4	7	1		17
- Interface consistency (buttons, labels, breadcrumbs)	2	8	5	2		17
- Number of clicks	1	6	8	2		17
- Content Creation		11	5	1		17
- Content Management	1	9	6	1		17
- Assessment	1	10	6			17
3. E-portfolio - options						0
- current support (course level)		13	4			17
3. Blogs/Wiki- options						0
- current support (course level)		12	4	1		17
4. Pedagogical Flexibility						0
- Content		13	3	1		17
- Assessment	1	12	3	1		17
- Announcements	2	10	3	2		17
5. Technological issues						0
- cross-platform (Windows, Mac, etc.)	1	11	3	2		17
- help feature (robustness)	2	13	2			17
- browser support - plugins	2	13	2			17
- RSS linking	1	11	2	3		17
Total:	40	243	105	20		

Faculty currently using WebCT	Participant 1	Participant 2	Participant 3	Participant 4	Participant 5
What do you like best or least about our current LMS programs?	Cummulative database capability. We were able to design an entire curriculm that fit into the WebCT format - it accomodated our needs. Coding exam questions / course assessments.	Layering, Exam questions coding, surveys, selective release, multiple small group activities, flexible design	Best: Flexibility, ease of use Least: Embedded Java code problems lack of a database for multiple course use.		Best: Support from ITRC Least: lack of features and flexibility, endless clicking for simple tasks, lack of new components (eg. Blogs, wikis, disc options)
If you would have to use another LMS product, what would be your biggest concern?	Cost for faculty time to learn and transfere content. Loss of data and data continuity	Loss of the above capabilities.	Easy to use		non-propricitary components / materials for ease of use. Cost, flexibility, ease of transition for others.
Sakai					
When we looked at the interface, what was your first impression?	Cumbersome testing navigation. Is there really no private communication? No private chat rooms. No overall group seperation.	Boring. Course abbreviations across top are hard to understand. Menu too long, too much scrolling.	Much more like a web page - good	Needs Java and PDF plugins. Upto date and in style. Easy navigation.	Standard LMS appearance, made to appear quite akin to WebCT/Blackboard interface, good with all courses in top menu all the time.
When reviewing the content management tools, what did you like best and what did you like least about the tools?		I like the permissions associated with file management and the RSS Feeds. I didn't like that there is no small group privacy.	Common access to resources - good	the left navigation bar is good. Seems as flexible as WebCT - good.	Multiple sections, module plugins like WebCT content modules, start/stop times a plus, seems to work much faster than WebCT. Unnecessary clicks for quizzes/discussions/etc.
When we looked at the communications tools, what did you like best and what did you like least about the tools?	Likes: Nothing except announcement section ease of use. Dislikes: inflexable chat/discussions, only use one chat at a time, no private messages. Calendar too superficial.	Not enough looking at them to form opinion. Can't grade discussion postings. Can't forward out email.	No Private bulletins and discussions - bad - very bad. Bulletins up front - good. Bulletins easier to edit than text blocks. Private chat - bad. Cannot send email outside Sakai - bad.	Least: can't monitor multiple chats at same time, like WebCT, poor tool. No anonymous.	Lack of private chats/discussion boards for students. Announcements better than WebCT, offers pretty clear "news"/"info" content. Possibility of forced subscriptions. No private messages in Sakai chat. Like: has RSS feeds and wiki tool
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	Gradebook is unacceptable. Can upload template	Likes: anonymous grader, audio recording question. Dislikes: no small groups, no grading discussions, hard to use assignment tool to create manual columns, can't ass calculated columns.	Best: sharing questions and catagories between courses. Least: Gradebook - cannot add own calaculated columns - bad.	Gradebook is a HUGE problem.	Tests/quizzes and assignments (like WebCT now) good in there anonymous grading option and audion responses. Gradebook probably the weak point here.
After reviewing this product, what did you like best or least about this product?	Unacceptable	No anonyous survey tool!	Best: Common access to quiz questions and files. Least: inflexible gradebook, no private or small groups bulletins or discussions.	Assignment and gradebook tools are inadequate. Content chare is good. RSS is good.	Open Source product with more options/flexibility than WebCT 4, comparable with WebCT 6. Calendar import - .csv files?? Least => lack of private chats/disc./group work
WebCT 6					
When we looked at the interface, what was your first impression?	Impressed with upgrades	Clean homepage	Familiar	Looked good	Tabs + drop-downs, + breadcrumbs, + links - very cluttered interface. Blah - same ol', same ol'. Why slower drop-down menu + left side menu + breadcrumbs?
When reviewing the content management tools, what did you like best and what did you like least about the tools?	Excellent! Expands capability for case-based learning.	Likes: love the layers, selective release!! Dislikes: file management screen 2-frame layout takes up too much screen space.	Much better - Fewer clicks, less cupication. Common content for multiple courses - good!!	Global events in claendar - good. Private group discussions are excellent, linking to discussions is excellent too.	The current product is kludge, this is just more kludge. Still can't upload more than 1 file at once.
When we looked at the communications tools, what did you like best and what did you like least about the tools?	chat rooms - excellent format for group work.	Likes: Private groups, sub topics, links to specific topics. Dislikes: doesn't use external email for mail.	More flexible announcements - good	Chat and discussions very good - separate file for chat	No blogs, no wikis. Have to turn off popup blocks (bad). All chats logged now. Private group discussions. Discussion sorting still lame.
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	Grade book options very good. Testing categories - very good. Meets my needs for PA Program.	Likes: Same capabilities, Close question type. Dislikes: no sharing questions.	Embedding Java in quizzes still a problem. Much better gradebook.	gradebook view and management is wonderful! Useable!	Same as Sakai - quizzes and assignments. Managers gradebook options finally improved
After reviewing this product, what did you like best or least about this product?		Liked it's ready to go without redesigning, layers in the design, and gradebook.	Best so far. But will it last?	Looks very good. Brower issues will be a problem.	+ gradebook improvement - interface
Moodle					
When we looked at the interface, what was your first impression?			Busy		Organized on weekly/topic/forum/design. + meta-courst concept (share from course to course). All forums posts @ ? new. Slightly busy, but extremely flexible/adaptable. Interface looks like many wiki/blog sites. Help screens great.
When reviewing the content management tools, what did you like best and what did you like least about the tools?	Doesn't work for PA Program - too hard to format for whole year curriculm.	Too long homepage boring, no layers. Easy to manage layout on homepage.	Metacourse - nice. Nice help menus. Nice content icons. Very flexible		Content modules for WebCT transfer ower. Generally fine. Great icon views of file types.
When we looked at the communications tools, what did you like best and what did you like least about the tools?	Private chat with instructor. Peer assessment.	No real differences/advantages	Better than Sakai - not as good as WEbCT. Groups and subgroups - but not very flexible.		Has wikis/blogs/rcs by default. Only uploads 1 file at a time. Great for importing data (modules / quizzes). Print charts of whose online 1 M?. Publish chart log to all possible not a survey tool there yet. Forums (3) - general - blog/e-mail - task. Groups (3) course or activity public or private.
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	Good Quiz tool. No Survey tool! This is unacceptable.	Likes: addaptive mode, hot potato link to gradebook, lesson tool. Dislikes: quiz link confussion, no survey too currently! Single file assigment	Can't upload - Bad		Lots of options. Quizzing - quiz, assignment. Lesson tool is Superb. (Adaptive, flexible). Workshop tool also excelent - Scale, grading = great. Averages per assessment, merges with instruction. + Flexibility. +Learning - centered. - time needed for some to transfer their courses now.
After reviewing this product, what did you like best or least about this product?	Unacceptable	Liked no java script or java to use and metacourse. Didn't like that it was not able to create multiple small groups, no survey tool, layering, selective release, no gradebook upload, no text gradebook column.			

Faculty currently using WebCT	Participant 6	Participant 7	Participant 8	Participant 9	Participant 10
What do you like best or least about our current LMS programs?	Best -> Level of Support available through ITRC. Least -> Attempts to idiot-proof WebCt have made it very difficult to quickly and efficiently do day-to-day tasks. Access and tool modifications also poor in terms of modifiability.	No Answer	Best: Web Grading Least: Students post programming assignments with multiple subfolders	No Answer	No Answer
If you would have to use another LMS product, what would be your biggest concern?	Adaptability to user's needs, as opposed to WebCt protocols defining adaptability. Also, ability to import materials from other LMS's.	No Answer	shallow learning curve	No Answer	No Answer
Sakai					
When we looked at the interface, what was your first impression?	Clean and uncluttered - Effecicient use of tabs and menus.	No Answer	appears intuative	Bland. Where to begin is not obvious. However - also looks flexible, easy to navigate once you know how.	Tools were convenient, appeared easy to navitgate.
When reviewing the content management tools, what did you like best and what did you like least about the tools?	Course Management - Best -> Ease of adding/deleting tools. Worst -> Inability to specify order/location of tools. Course Content - Best -> Adaptability and access. Manipulation straightforward. Worst -> import module for other LMS's is weak.	No Answer	everything appears in one menu window	Still seems very choppy - How will it handle docs - pdfs? Looks to be applicable to Web-based courses, not as friendly for Web-supplemented?	Appeared simple to use with readily accessible tools.
When we looked at the communications tools, what did you like best and what did you like least about the tools?	Best -> Choice/adaptability/access issues with common tools are well-handled. I also like the Wiki tool quite a bit. Weaknesses -> Lack of ability to create private conversation with course is a hugh weakness. Open/public acess to all course materials and work is also highly troubling.	0 Private Discussion. E-Mail OK. WIKI Tool - Blog OK	best: chat room. Least: email	I like the formatted text options in discussions. I'm not comfortable with the e-mail function as described.	I don't use this with WebCT, but what I saw, what was projected, sounded both smiple and useful.
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	Best -> Ability to categorize and subcategorize quiz items is particularly useful. Weaknesses -> assessment tools overly skewed to "objective" tools use. More open-ended tools. Gradebook is also weak.	.0 Anonymous Survey Tool. Sub-categories, Question Database, Anonymous Grader Tool. Grade book is not as sophisticated. Assignment - able to type in answer able t Complete Templates by typing. Share question categories.	fix upload assignment tool, grading needs more features added.	I like the apparent flexibility of the assignment tool, and the fact that you can easily share questions with other instructors. The grading function actually seems easier than the current WebCT grading.	I liked the rationale idea for M.C. tests. Lots of options. Some features limited compared to WebCT but overall positive.
After reviewing this product, what did you like best or least about this product?	Best -> Choice and adaptability for the instructor are excellent. Least -> privacy/access issues a hugh concern. Some big holes - gradebook.	No Answer	first impression - intuative	Seems like it would handle evrything I currently do in WebCt. I think the quiz functions are an improvement. The look is still bland. Too much text.	Testing features very positive, appeared to be an easy product to work in. Nothing negative.
WebCT 6					
When we looked at the interface, what was your first impression?	High production values but ultimately no more efficient or useful than WebCT 4. More sophisticated version of WebCT interface, but still a WebCT interface. (tongue-out frowny-face !! inserted).	Requires Java Script and Java. Not supported by all browsers. 3 Says to utilize - Build, Teach, Student. Web data upload.	Interface more clear than current - navigation tools.	I like the different tabs with the student view vs teacher view. Looks more open and readably than the "box approach" of Sakai.	Looked easier to use - friendlier, cleaner, liked the 3 options.
When reviewing the content management tools, what did you like best and what did you like least about the tools?	Best -> Nice use of menu bar items under course tools . Left-hand menu, very efficient. Best -> Like ability to share content across courses - My WebCT view	Content Manager share files among courses.	navigation through appears easier than current version.	File manager tool much improved. Looks easier to add, find files than current WebCT.	Improved, simpler to use. Much familiar with current format.
When we looked at the communications tools, what did you like best and what did you like least about the tools?	Best combined whiteboard and chat. Best -> announcement tool is good/ adaptable to the range of course needs. Best -> global counter tool best - nice upgrades to discussion tool but still can't sort beyond WebCT 4.0 -> really need this functionality for assessment purposes. Weaknesses -> chat room logs still crude.	Announcements, Pop-up, e-mail, my WebCT, Global Events on calendar - set by. Private Group Discussion. More than 4 groups. Combines whiteboard and chat.	I like annoucement popup windows	I like the fact that announcements can expire, and also that they will pop up - but what about pop up blockers??	Again, I don't use this much but what I saw looked easier to use.
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	Best - gradebook. Management menus good. Weakness - can't share categories across courses (Big). Best - menu item for each tool is handier, easier to use. Best - categories / subcategories of quiz items. Weakness - No significant functionality upgrade from 4.x. Weaknesses - limited range of tools for open-ended evaluation and assessment.	Grade book - calculated, manual. Quizes. Drop down for tools. New Question type. Subcategories of questions. 0 sharing of question data base. In line typing or upload assignbment	appears more intuative than current version.	Seems to be unchanged basically, although the addition of different question types is good. Also easier to see where you are in the quiz creation or editing process.	Easy to use, drop-down convenience features. Test options not as comprehensive or SAFE.
After reviewing this product, what did you like best or least about this product?	Best -> nice attention paid to some longstanding weaknesses/ irritants. Least -> dependece o specific browsers and operating system is a killer…I can't begin to imagine the support issues this will cause at both instructor and student levels. Prettier than 4.0 and somewhat more functional; still maintains standard WebCT weaknesses.	No Answer	more robust but navigation is nor as easy as Sakai.	Improvement over the current interface - but worth the money??	Convenient drop down menus, new student grade recording system.
Moodle					
When we looked at the interface, what was your first impression?	Best interface of all three LMS examples - intuitive efficient, contemporary. Metacourse content approach is a really cool feature. Central column w/menues/features to left and right is really flexible.	0 Java or Java Script. Outline by week topic. More instructor control. Appears easy to use. Allows individual data. Meta course concept - Documents to share.	Compact with good navigation.	Busy, easy to get lost. Lots of options (could be good or bad). Tracking system is cool. I like the editing on/off mode.	Liked the viewer option, Calendar open on home page good, less for students to open.
When reviewing the content management tools, what did you like best and what did you like least about the tools?	Best user "usability" is outstanding. Very flexible/multiple ways to use/view/see - not limited to either Sakai-like or WebCT like approaches to in-the-box thinking.	Content Organizer. Seemed to convert easier. Indicated full type you are working with. Editing seems easier. Import data from other courses.	Most intuative of the three products. I like the user statistics capability.	This makes more sense - more builder control, at least for those who are inclined to building. Will it get more people to move courses on-line, or be scary??	Very simple editing features, immediacy of on screen help.
When we looked at the communications tools, what did you like best and what did you like least about the tools?	Best - most up-to-date suite, with respect to current web standards and technology. Weakness - Some of the views in central frame are a bit busy.	Customized surveys in progress. Forum - Simple, specific - private, subcategories. Ten tools. Group Discussion - Course group - froup at large. RS feed WIKI. Chats are logged - can publish. Chate - private instant message messages. Will show up on calendar. Calendar feature is interactive.	I like the Wiki feature and the calendar seems easier to use.	Peer imput - assessment an interesting touch. I like the calendar tool. The fact that you can add your own survey might be an issue.	Very comprehensive - I don't use this much.
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	Best range. Quiz tools goes way beyond Sakai and WebCT. Best in terms of assessment, particularly reporting. Moodle is by far the most assessment oriented fro the ground-up. Best - Tabbed reporting based on student profiles is a very useful feature.	Quiz tools. Categories/Subcategories. Acceptable range on math. Adaptive - allowed more than one try - different scoring. Assignments - Single file assignments, workshop-upload-peer-instructo - Weighting 20/80. Random Subset. Interactive -Lesson Tool - Case Study Tool. Hot Potato Tool interface with Moodle. Ablity to grade discussion.	workshop tool should be useful.	I like the randomization of answers and questions. I like the Hot Potato formats. Lots of cool options!	Liked randomized questions & answers, Hot Potato nice feature with the options provided, weighting features on grade sheet good.
After reviewing this product, what did you like best or least about this product?	Moodle is by far the most contemporary and up-to=date with respect to interface, both usability and transferability Ground-up assessment tool. Moodle goes beyond, way beyond, the othr two LM's - in terms of offering more than just course management and a course-by-course basis.	No Answer	more robust than Sakai, screen appear more cluttered than Sakai or WebCT	This one seems the most original - It is so flexible that it may appeal to below-average users, but also might have steeper learning curve. Covers the demands from a range of users bettre?	Help tools, great assessment tools, no negatives.

Faculty currently using WebCT	Participant 11	Participant 12	Participant 13	Participant 14	Participant 15
What do you like best or least about our current LMS programs?	Best - E reserves compatibility is great. Discussion tool. Least - Cumbersome grading recording/input. More options for presenting quizzes.	Clunky levels - i.e. moving through the layers for uploading files and placing on namepage - Regrading of quizzes (error in key) is an important fun tion. The fact that web page created ~ WORD doesn't work on webCT!	It would be good to have announcements that can come up at a predetermined date and time. Best: I think I have finally figured out how to do most of what I need to do. Least: There are too many steps to get things done (Uploaded) and I agree that update is a hassle.	Like: Student access to technology, grade storage, and distribution. Dislike: inflexibility to adaptiation based on course needs.	need to update. Inability to really see student view. Big learning curve. The more I learn the more I like.
If you would have to use another LMS product, what would be your biggest concern?	Transition of current courses to new LMS student access w/ "normal" computer technology. Ease of streaming video.	Compatiflity with WebCT (ie transition of old course material to new system). A good HTML editor! Compatibility with WORD (see above), HTML (It is great the ITRC will do the transfer of courses!)	The transition costs and time to learn new system.	Cross platform access? Technical frustraction with new systems. Overwhelming low end uasers with new system / new programs.	New learning take time - I'm short of time! Students also have to learn - how will they be educated?
Sakai					
When we looked at the interface, what was your first impression?	Supports all browsers - Java script - red ocher for video.	Navigation. Great navigation ability - a big plus. I don't mind "no icons" - looks like file handling is less clunky than WebCT.	It looks very clean and user friendly	Dislike: Too much avaiable at the 'My Workspace' level / How do I get to my course? Like: Instant access to all tools at all times.	Not colorful, dull. Unattractive to the eye.
When reviewing the content management tools, what did you like best and what did you like least about the tools?	I like icons color for aesthetics. Homepage seems a bit "busy" - but it is just different - I'll adapt! Not able to link quiz right in content. One more area for student to find.	WYSYG - The "no student view" is nice (though there is some hope of it I guess). I'd like to ask now how linking is done (eg Breeze Narated).	I like the material organization on the "front page"	Like: Much more intuative interface. Dislike: new terminology - can be confusing? No icons	No different in student vs. instructor view
When we looked at the communications tools, what did you like best and what did you like least about the tools?	Looks like updating announcements and having ability to see previous ones is easier. Is there a notice when I have a message from student? I don't currently use "chat room" maybe I will now.	Mail Blog. I'd like the personal that's featured to be present, but it's not damning. Mail flag is very important (i.e. I need to see if there is mail, at a glance).	Discussion option seems more useful. Announcement archiving - time releasing good	Like: more control over preferences. Dislike: limits on chat (only one chat at a time?)	you can have multiple instructors so they can receive their own mail. Like, might be useful for students.
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	Grading is not as "functional". I like WebCT being able to calculate re:excel. The Manage Colums is there in WebCT - cumbersome but it is there.	Password? For monitor proctor. The flexibility of the grading book may be a problem - didn't usually use in WebCT but want to. The quizzes looks more friendly than WebCT.	Gradebook doesn't seems as good. Quiz feature looks useful.	Like: Inline Submissions!! Audion recording! Dislikes: limited gradebook options.	grading can be anonymous. Least - can't have as much choice with grading colums.
After reviewing this product, what did you like best or least about this product?	Not too aesthetic - very clinical. Like that it "appears" user friendly. All I need is on the screen right there. So should we suspect ongoing versions as this is infant stage?	Seems intuitive - I think I could use it easily - I'm ok with bland -- student can handle that ok-! If you could make each page or funcction a little different in appearance it might make it easier to tell where you are.	Looks very easy to use. Like front page. Like information page.	Like: flexibility of production terms of adaptations. Dislike: somewhat clinical / impersonal in feel	Good - RSSV, automatic update of website - then I won't have to check and see if the links still work.
WebCT 6					
When we looked at the interface, what was your first impression?	Browsers "seem" to be more restrictive esp. for MAC. Appears "writing is on the wall" - we are not going here.	Friendlier interface - cleaner looking than old WebCT.	None	Somewhat cumbersome with 3 views and the homepage default each time.	It's really different than current version
When reviewing the content management tools, what did you like best and what did you like least about the tools?	Navigation tools easier access. Looks similar just updated.	Better navigation in building than old WebCT.	None	Same as WebCT 4	looks easy to use
When we looked at the communications tools, what did you like best and what did you like least about the tools?	Global calendar very helpful for student not important to me as a designer. HTML editor seems the same.	No real change in my perception of this vs old WebCT.	None	Same as WebCT 4	pretty similar, HTML editor available - easier.
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	Gradebook significantly improved - much better	Good gradebook function.	None	Same as WebCT 4 freezing columns	looks ok - the colum modifications should be easier.
After reviewing this product, what did you like best or least about this product?	Best - updated gradebook - it is best of 3 so let's integrate.	It would be ok to keep WebCT, but I prefer Moodle.	Wouldn't want to switch again soon - so would discount using this product.	unimpressed with the 'improvements'	somethings are the same, but looks like I'll have to do a lot of learning even if we stay with WebCT. Can't do everything from build.
Moodle					
When we looked at the interface, what was your first impression?	No java script or java - more browser friendly. Meta file for all sources. Needs merged e-mail. Weekly outline more aesthetic and all edit tools right there. Appears we can have all requirements for the week in one content module.	No java, browser friendly. Calendar, meta course (common), easier ?, Pretty busy student screen, spell checker. Nice navigation - better than Sakai, I like "no java" that's clunky on WebCT - Common area is great - the student view is busy looking but balenced. I like better than Sakai	Nicw look - seems easy to use	Like: very user friendly, user - welcoming Dislike: user options seem a bit overwhelming to low end users.	a little busy. Automatic archiving of announcements.
When reviewing the content management tools, what did you like best and what did you like least about the tools?	Symbols seem to be user friendly. Would like to modify the "homepage" if I have no lectures that week, except e-resources and quiz, then would like to only have that showing.	flexible, fast, easy to use	Like all the links on the front page / the button for settings	Like: Very intuitive. Dislike: no conditional release	editors abilities
When we looked at the communications tools, what did you like best and what did you like least about the tools?	I don't use chat. I would assume e-mail is pretty straight forward.	I like close message capability - I assume mail is mail - I want a flag for presence of mail.	Announcements/events - timing/archive Okay!	Like: Private message in chat, scheduled chats. Dislike: N/A	seems pretty similar to WebCT - (I haven't used chat on WebCT ever.)
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	Lesson tool way cool! I like peer assessment tool and limitations. Grading tool/page more applicable and does more for me.	Assessment Is Wonderful! - branching (tree) is Great Tool!! Grading looks Great!	None	Like: Lession, Hot potatoes, Everything!	There might be too many flashy choices - bells and whistles that might not really add anything. There does seem to be more options.
After reviewing this product, what did you like best or least about this product?	Aesthetics less clinical as it had color and icons. Grading/assessment tools more to my liking. Like Hot Potato. More similar to WebCT.	I like close message capability - I assume mail is mail - I want a flag for presence of mail.	Editing options in front page looks good.	What's not to love?	Been around onger, more choices overall

Faculty currently using WebCT	Participant 16	Participant 17	Participant 18	Participant 19	Participant 20
What do you like best or least about our current LMS programs?	Tracking is very important - good - would like to see more tracking. Bad - multiple layers of clicking	Best: Once familiar with WebCT it is easy to use and it has a lot of 'tools.' Least: Requirements for update student view - for somethings but not all.	(tedious to edit quizzes/etc. in WebCT - too many 'clicks' to do things (database updates after each edit)	Like: it is reliable, anonymous surveys.	None
If you would have to use another LMS product, what would be your biggest concern?	students have a word processor they can use. Tracking, HTML editor.	Ease of student navigation - not distributed like WebCT. When I generate an assignment and make sure the student knows to do it by putting a link within the module, one in an overview, and in the syllabus, since I don't know what tools the student will			None
Sakai					
When we looked at the interface, what was your first impression?	Bland -	Looks easy to navigate - nicely organized	clean/utilitarian looking	Efficient	None
When reviewing the content management tools, what did you like best and what did you like least about the tools?	I don't like the fact that there is not an instructor - student view. I will have to make sure students don't view everything.	Best: seems much easier than Webct - and less time consuming. Least: I still have to learn how to do it! Not really a Sakai specific problem.	Best: ability to grat various group permissions, sections of class managed seperately, ability to all tools. Least: can't tell yet	it looked personable - just different from WebCT	too much information on a single page, but nicely organized.
When we looked at the communications tools, what did you like best and what did you like least about the tools?	I don't know if having students email form outside the course is good? Seems like many layers - for me to keep track of.	Best: I learned about useful tool availability that I was previously unaware of. Least: Rapid notification if I receive e-mail within the course like webct envelope on My WebCT page.	Best: sorting and posting of announcements, email from anywhere, dropbox feature. Least: perhaps email from anywhere.	Although we didn't see it, I like the Wiki	Nice to have the chat capability. Nice to be able to limit that number of messages displayed.
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	Only one cummulative column - BAD! Good that students can write assignments.	I like the option to include text anywhere with in the quiz/test tool with multiple choice questions. Least: one cumulative column for entire course in the gradebook.	Best: capability of posting various types of quizzes/etc. Least: gradebook capabilities - should be as programable as a spreadsheet.	I like the 3 different types of assignments - offline, inline, and online	It appears difficult to record homework/exam scores problem-by-problem and then view them in detail. Al I saw was a summary.
After reviewing this product, what did you like best or least about this product?		This looks VERY EAST to use - I like the overall organization - all the info you need is visible - easy navigation	Best: clean look of toolbar on left hand side. Least: ?		Extremely plain.
WebCT 6					
When we looked at the interface, what was your first impression?	None	None	Cleaner looking than current WebCT (I don't like the 'cute' icons	Cleaner, more intuative	Looks more like a commercial product - which, I guess, is should. Would probably result in less eye strain.
When reviewing the content management tools, what did you like best and what did you like least about the tools?	None	None	Best: drop-down menues are better. Least: can you add to the tools?	I like that you can include assignments in content modules	This version looks a lot nicer than previous versions. The inerface is much more familiar - similar to windows.
When we looked at the communications tools, what did you like best and what did you like least about the tools?	None	None	Best: announcements - set as pop-ups. Least: can students access your course email from outside webct?	the tools look fairly familiar - that will make learning easier	I like the availability of the email math editor - there are many times when I need something like that.
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	None	None	Best: improved gradebook features. Least: ?	The quiz tool looked easier to use than in version 4.	I still don't see a convenient way to record homework scores by problem, rather than assignment.
After reviewing this product, what did you like best or least about this product?	None	None	Best: elimination of many unnecessary moves. Least: proprietary.		Much nicer
Moodle					
When we looked at the interface, what was your first impression?	More comfortable - looks user friendly	Too much on one page. Nice to have it all in formative - each course could have a lot of scrolling required (there are preferences)	a bit crowded	Powerful	more busy, but well organized.
When reviewing the content management tools, what did you like best and what did you like least about the tools?	None	I like having the icons for making the modules easily accessible - 'editing on' feature	Best: tracking feature! RSS feeds. Least: editing mode a little confusing, but probably will get better when working with it.	I like the ability to view content in different modes - category, weekly, etc.	more intuative than the others.
When we looked at the communications tools, what did you like best and what did you like least about the tools?	Looks good throughout	looks equivalent to Sakai	Best: photos identifying people. Least: ?	I like to rating capability in the discussion tool.	more intuative. Like the individual evaluation capability.
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	None	I like the lesson tool option in quizzes	Best: Assignment tools, tool assessment, lesson tool. Least: hard to tell how flexible gradebook is.	Peer assessment would be useful.	Liked peer review capability.
After reviewing this product, what did you like best or least about this product?	More similar to WebCT with great additions.		Best: open source - extension on the way. Least: ?	I like that editing of content can be easily done on the same page you are viewing, (using arrows, etc.)	Appears more configurable.

Faculty not using WebCT	Participant 21	Participant 22	Participant 23
What do you know about Learning Management Systems (LMS)?	None	None	Not a great deal. I haven't used WebCT.
What do you know about our current LMS - WebCT?	None	None	Mainly that it exists!
If your program required faculty to use an LMS, what factors would influence your choices in using such a product?	testing, videos, powerpoint, and photos	Open Source - community driven - no commercial ties	Ease of use obviously, elegance, economy and simplicity
Sakai			
When we looked at the interface, what was your first impression?	None	I like the list of courses across the top, worksite info page looked user friendly.	It looked easy to use, if not especially attractive visually.
When reviewing the content management tools, what did you like best and what did you like least about the tools?	None	indirect link to quizzes seems poor, week by week availability seems useful	Seemed straight forward, organized. Not all was especially intuative. It seemed foreigh - in the form presented
When we looked at the communications tools, what did you like best and what did you like least about the tools?	None	Recent announcments I would definitely use. Adobe printable student mats is a plus!	I imagine the management is pretty stright forward. I'm sort of mixed in feeling about the log-in, in-site email.
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	honor tool - good. Quiz not linked, won't weigh evaluated assessments.	Testing tool - T/F 'rationale' - good idea. Assignments - like 'honor code.' like students' ability to see own grade.	I like the notion of rationale, this helps develop thinking. I'm not a big fan of getting on-line submissions (I have to print them off myself.)
After reviewing this product, what did you like best or least about this product?	can just use gradebook	Initially, this product appears to be user friendly - I'd like to try it.	
WebCT 6			
When we looked at the interface, what was your first impression?	None	Liked icons and names of side bar stuff, etc., seemed more understandable than Sakai which is more in computerese.	Looks immediately more attractive, maybe too many bells and whistles.
When reviewing the content management tools, what did you like best and what did you like least about the tools?	None	Doesn't have information regarding who is signed on.	It didn't seem immediately as useable, as intuative, it looked difficult.
When we looked at the communications tools, what did you like best and what did you like least about the tools?	None		It seemed to present multiple options for communication. I liked 'virtual office hours.' I don't kown if I'd use many of them.
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	None		Wasn't much to distinguish it, other than the grade book, which I liked.
After reviewing this product, what did you like best or least about this product?	None		Interface seems more awkward. This seems more 'computer speak.'
Moodle			
When we looked at the interface, what was your first impression?	None		I though the downloadable content the RRSP, the calendar was atrractive. 'upcoming events.'
When reviewing the content management tools, what did you like best and what did you like least about the tools?	None	I like the ability to have student pictures!	The modular approach was better, "add an activity" was better. Seemed like 'management' was more intuative, students identify themselves. I like the tracking element. Peer assessment was interesting. These seemed more useful.
When we looked at the communications tools, what did you like best and what did you like least about the tools?	None	Calendar link to activity - good	
When we looked at the assessment tools, what did you like best and what did you like least about the tools?	None	Student tracking tool is neat. The variety of quizzes would be useful, flashcards, etc. very interactive. Gradebook categories would be useful (as well as weighing).	I actually liked the greater flexibility, the branch tool from hot potatoes seemed like a good idea. The gradebook was interesting.
After reviewing this product, what did you like best or least about this product?	None	Well set-up for multiple sections - liked code of conduct.	

Appendix IIIA

Assessment Best Fit Rubric Results

Appendix IIIA

LMS Strategic Review: Assessment Best Fit Rubric

Rubric adopted from CHICO	WebCT			
Areas of Consideration	Doesn't Meet	Meets	Exceeds	Superior
Academic Program Assessment				
1. Solid course-level assessment			X Does a good job with typical course-level assessment needs.	
2. Potential for program level assessment (WASC)		X Can meet this needs with work-arounds various staff have developed over time.		
3. Reporting capabilities		X		
- export and aggregate data across courses/programs		X again, with some workarounds necessary.		
4. Potential to support Student Evaluation of Teaching			X	
5. Potential to support departmental periodic reviews		X these needs are fairly consistent or the same as program-level assessment, so the same comment applies.		
- content management/sharing (standards, evidence)			X	
	0	4	3	0

Appendix IIIA

LMS Strategic Review: Assessment Best Fit Rubric

Rubric adopted from CHICO	Moodle			
Areas of Consideration	Doesn't Meet	Meets	Exceeds	Superior
Academic Program Assessment				
1. Solid course-level assessment			X	
2. Potential for program level assessment (WASC)				X Moodle has by far the greatest potential of the three LMSs; it's been built from the ground up to go beyond course-level needs and integrate programmatic needs.
3. Reporting capabilities			X with short-term development potential to be Superior.	
- export and aggregate data across courses/programs			X with short-term development potential to be Superior.	
4. Potential to support Student Evaluation of Teaching			X	
5. Potential to support departmental periodic reviews			X same as program-level assessment	
- content management/sharing (standards, evidence)			X	
	0	0	6	1

Randy, there could be some sound reasons to go with WebCT 6 in the short term, but I'm afraid that such a decision would leave us wondering in a couple of years why in the world we didn't go with Moodle. I don't think there's any question that Moodle is far better positioned to serve ISU's greatest common good over time in much stronger and more productive ways than the other two options. I was a little surprised to find that I actually liked WebCT 6 better than Sakai, but was blown away by how far ahead Moodle is than the other two. In a very real sense, WebCT is a product that is near the end of its development cycle, while Moodle's still at the very beginning of its cycle. I worry that choosing WebCt 6 will doom us to a future of hacking workarounds to do what Moodle will increasingly grow into doing natively.

Appendix IIIA

LMS Strategic Review: Assessment Best Fit Rubric

Rubric adopted from CHICO	Sakai			
Areas of Consideration	Doesn't Meet	Meets	Exceeds	Superior
Academic Program Assessment				
1. Solid course-level assessment		X		
2. Potential for program level assessment (WASC)		X the potential is there but not fully developed in current version		
3. Reporting capabilities		X		
- export and aggregate data across courses/programs		X		
4. Potential to support Student Evaluation of Teaching		X		
5. Potential to support departmental periodic reviews		X same as program-level assessment		
- content management/sharing (standards, evidence)			X	
	0	6	1	0

Appendix IVA

Support Best Fit Rubric Results

Appendix IVA

LMS Strategic Review: ISU Support Staff Best Fit Rubric

Rubric adopted from CHICO

Areas of Consideration	Moodle				Notes/Follow-up
	Doesn't Meet	Meets	Exceeds	Superior	
Support & Sustainability					
1. Migration of courses and content					
- Tools/utilities/process		3	1		
- Ease for faculty			3	1	
- Ease for support staff		3	1		
- Response from reference sites		2	2		
- Migration of content out of product		2	2		
2. Training and support for staff				1	Great help, easiest learning curve
- "Train the trainer" available onsite/online		1	2	1	
- Ease of retraining (5 days)		1	2	1	
- Ease of new training development (out of the box)			2	2	
3. Training and support for faculty/departments				1	Great help, easiest learning curve
- Basic Retraining (8 hours)			3	1	
- Introduction (12 hours)			2	2	
- Advanced Training (30 hours)			2	2	
4. Accessibility (508)		1	3		
5. Platforms, browsers, plug-ins (Mac, PC)			2	2	Best multi-platform support
6. Ease of use for staff			1		
- course design			2	2	very easy to use
- application administration		2	1	1	
- application support			3	1	
- distributed administration		4			
7. Single-sign-on access			1		
- Library systems/subscription services		3	1		
- other campus systems		1	3		
Additional comments	0	23	39	18	Overall better fit for ISU

Appendix IVA

LMS Strategic Review: ISU Support Staff Best Fit Rubric

Rubric adopted from CHICO

Areas of Consideration	Sakai				Notes/Follow-up
	Doesn't Meet	Meets	Exceeds	Superior	
Support & Sustainability					
1. Migration of courses and content		1			
- Tools/utilities/process	2	2			
- Ease for faculty	2	1	1		
- Ease for support staff		4			
- Response from reference sites		4			
- Migration of content out of product		3	1		
2. Training and support for staff	1				Poor help files
- "Train the trainer" available onsite/online	3	1			
- Ease of retraining (5 days)	2	2			
- Ease of new training development (out of the box)	3	1			
3. Training and support for faculty/departments	1				Poor help files
- Basic Retraining (8 hours)	2	2			
- Introduction (12 hours)	3	1			
- Advanced Training (30 hours)	2	1			
4. Accessibility (508)		3	1		
5. Platforms, browsers, plug-ins (Mac, PC)		2	2		good multi-platform support
6. Ease of use for staff		1			
- course design	1	3			
- application administration	3		1		
- application support	3		1		
- distributed administration	2	1	1		
7. Single-sign-on access		1			strongest of the LMSs in this
- Library systems/subscription services		4			
- other campus systems		4			
Additional Comments	30	41	8	0	

Appendix IVA

LMS Strategic Review: ISU Support Staff Best Fit Rubric

Rubric adopted from CHICO

Areas of Consideration	WebCT				Notes/Follow-up
	Doesn't Meet	Meets	Exceeds	Superior	
Support & Sustainability					
1. Migration of courses and content		1			
- Tools/utilities/process	1	2		1	
- Ease for faculty		3		1	
- Ease for support staff	1	2	1		
- Response from reference sites	1	2	1		
- Migration of content out of product	1		3		
2. Training and support for staff	1				so-so help
- "Train the trainer" available onsite/online	1	3			
- Ease of retraining (5 days)		2	1	1	
- Ease of new training development (out of the box)	1	2		1	
3. Training and support for faculty/departments	1				so-so help
- Basic Retraining (8 hours)	1	3			
- Introduction (12 hours)	1	3			
- Advanced Training (30 hours)	1	3			
4. Accessibility (508)	2	1	1		
5. Platforms, browsers, plug-ins (Mac, PC)	4				
6. Ease of use for staff		1			doesn't work w/Linux only specific browsers
- course design		3	1		
- application administration		3	1		
- application support		3	1		
- distributed administration	1	2	1		
7. Single-sign-on access	1				
- Library systems/subscription services		4			
- other campus systems	1	3			
Additional comments	20	45	11	4	Have to pay for add-ons that are in Moodle & Sakai from get go.

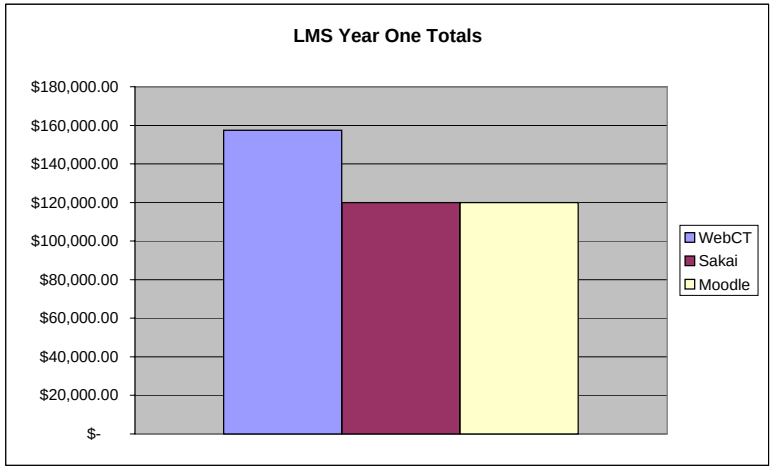
Appendix VA

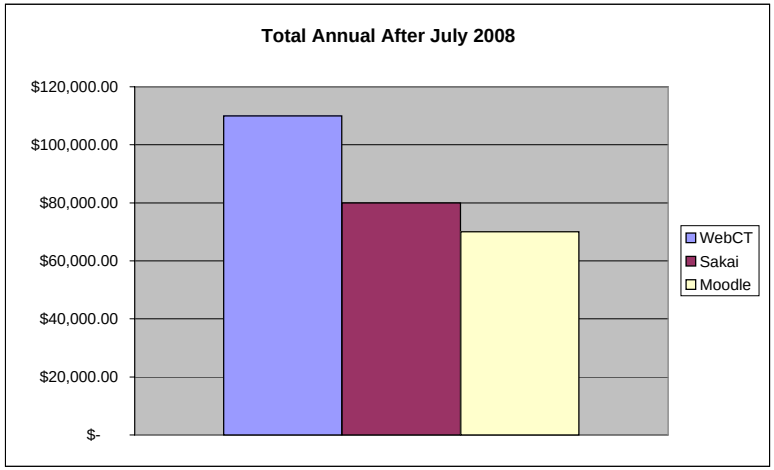
Financial Evaluation of WebCT, Sakai, and Moodle

Appendix VA

	Moodle		*Sakai*		*WebCT*	
	yr 1	*on-going*	*yr 1*	*on-going*	*yr 1*	*on-going*
Labor						
[1] *LMS Administrator - Loaded*	$ 70,000.00	$ 70,000.00	$ 70,000.00	$ 70,000.00	$ 70,000.00	$ 70,000.00
3rdParty Support						
[2] *Estimated by ITRC*	50,000.00	-	50,000.00	-	50,000.00	-
[1]Vendor/Consortium Fees	-	-	-	10,000.00	37,500.00	40,000.00
Totals	$ 120,000.00	$ 70,000.00	$ 120,000.00	$ 80,000.00	$ 157,500.00	$ 110,000.00

[1] Labor nor Vendor fees include estimated increases which are both very likely
[2] 3rd Party support fees are estimated based on conversations with vendors and other institutions, as well as experience





Appendix II

LMS Fall Pilot Report

LMS Pilot Report (Moodle)

December 27, 2006

Instructional Technology Resource Center
Idaho State University

LMS Pilot Report (Moodle)

Summary:

Based on the results of the learning management systems (LMS) Focus Group Report, Moodle was selected to be evaluated during the fall semester of 2006 by Idaho State University (ISU) faculty and students. This LMS Pilot Report evaluates feedback from 20 faculty members and 500 students who have reviewed the Moodle 1.6 LMS software package. The ISU campus community currently utilizes WebCT 4.0, which will no longer be supported by Blackboard/WebCT after July of 2008 (this deadline coincides with ISU's license renewal), to deliver course materials and activities via the Internet. A typical upgrade path would be to upgrade to WebCT 6.0, but that process has been identified as a larger shift in support and resources than previously required for WebCT version upgrades. The goal of this study is to determine if Moodle is a better alternative to WebCT with regard to pedagogical value, financial concerns, support issues, assessment criteria for accreditation, integration with the information technology services, and dependable long-term solutions.

Background:

Based on the data collected from LMS Focus Group Report (see LMS Focus Group Report at <http://www.isu.edu/itrc/resources/LMS_Focus_Group_Report.pdf>) during the spring 2006 semester, the ITRC proposed a full-scale evaluation of Moodle. Faculty members in summer 2006 received ITRC support with instructional design and technology production to begin prototyping their courses in Moodle. An LMS survey instrument was designed and integrated into each course during the fall 2006 semester to evaluate levels of student and faculty satisfaction with Moodle. The results of the survey instruments will be demonstrated in this report and will provide recommendations for future LMS direction.

Student Satisfaction:

In the student LMS survey instrument, questions focused on issues on usability of and satisfaction with Moodle. The ITRC encouraged participation of the student population, because the users of the product needed to have a significant voice in this evaluation process in order to make it meaningful and reflective of our campus community. Students were selected based on their enrollment in classes by the faculty members piloting courses in Moodle. The students who participated in Moodle courses were exposed to various levels of online involvement.

Of the 500 students who were enrolled in Moodle courses during fall semester 2006, 108 participated in the LMS survey. Upper-division undergraduate and graduate students provided 57 percent of the responses, and lower-division undergraduate students constituted 43 percent of the student population participating in the survey. Each student participant had an opportunity to express his/her satisfaction with Moodle in a fifteen-question survey. The survey questions were designed to be similar in nature to those asked of the faculty members to determine their satisfaction in the Moodle learning environment, as follows:

1. I am comfortable using computer technology.
2. I can easily navigate from one task to another within Moodle.
3. I did not have any difficulty completing class assignments in Moodle.

4. I find the assessment tools in Moodle easy to use.
5. I find the communication tools in Moodle easy to use.
6. I found the Help information useful in Moodle.
7. I have used web-based course software (e.g., WebCT, Blackboard, etc.) before attending this class.
8. I prefer using Moodle over other LMS applications (e.g., WebCT, Blackboard, etc.).
9. I think a training session on Moodle would have increased my success in this class.
10. I was able to view my grades without difficulty in Moodle.
11. Moodle was straightforward and intuitive.
12. Moodle was used effectively by the instructor.
13. Overall, I would use Moodle in another course.
14. The organization and sequence of the course was easy to understand in Moodle.
15. What is your over all impression of Moodle?

Fourteen of the fifteen questions were rated using a four-level Likert scale (Strongly Agree, Somewhat Agree, Somewhat Disagree, and Strongly Disagree). A ranking of each of the fourteen items is presented in Chart 1 below. The overall data analysis from each course is available in the Appendix IB.

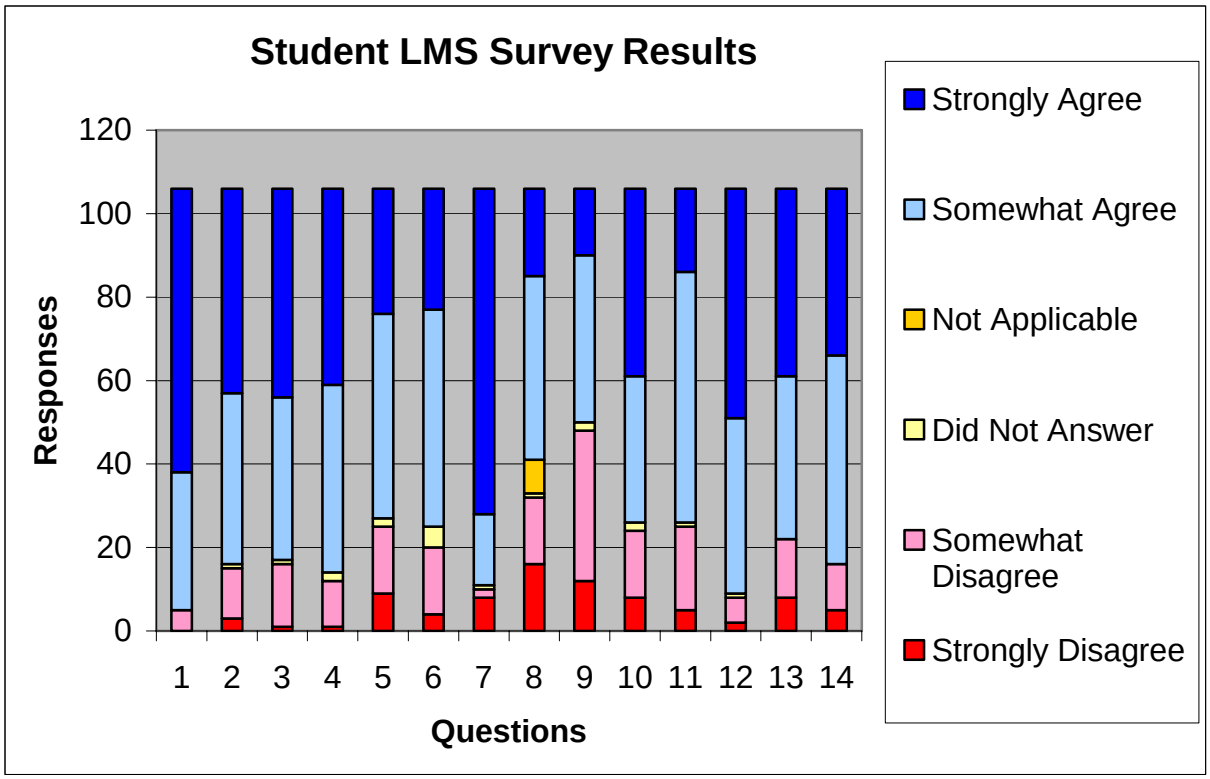


Chart 1: Student LMS Survey Results

The first survey question provided information about the comfort of the student utilizing computer technology. Students involved in upper division undergraduate and graduate level courses indicated a higher level of confidence in their technology skills then students participating in lower division courses. Overall, the students indicated that they were comfortable with computer technology. No students indicated marked discomfort with computer technology.

In questions 2, 4, 5, 10, and 11, students were asked to demonstrate their level of satisfaction with respect to usability, ease-of-use, and intuitiveness of Moodle. The majority of students (85%) surveyed agreed that navigating Moodle seemed easy, with only 11 percent strongly disagreeing. Students considered the ease-of-use of the assessment tools favorably (87%), communication tools (75%), and grade tools (75%) in Moodle. The overall intuitiveness of the Moodle environment was judged favorably by 75% of student participants. Considering a quarter of the student population was not satisfied with some of the tools and/or learning environment areas, data will be collected concerning the overall impression responses to determine specific problems that may have influenced their unsatisfactory experience with the Moodle environment.

In questions 3, 12, and 14, students were asked to demonstrate their degree of satisfaction with the pedagogical arrangement and criteria of each instructor's Moodle course. Most of students (84%) surveyed agreed they had no problem completing class assignments. Students strongly agreed that the instructor used Moodle effectively in his/her course offering (92%), but a lesser percentage of students (84%) indicated that the organization and sequence of the course was easy to understand.

In questions 6 and 9, students were asked to demonstrate their satisfaction with the help screens, information and training opportunities in Moodle. A slight majority of students (76%) surveyed agreed the help information in Moodle was useful, but only a small percentage of students (27%) strongly agreed with the usefulness of the help documentation. Only about half of the students (53%) indicated they needed training resources to be successful with Moodle.

In questions 7, 8, and 13, students were asked to determine their experience with other LMS products and their preference and willingness to utilize Moodle. The majority of students (90%) have used web-based course software (e.g., WebCT, Blackboard, etc.) before attending the class in which Moodle was employed. Of those who have used another web-based course system, 67% of the students slightly favored the use of Moodle over other systems. Students (80%) would use Moodle in another course, with only eight students (6%) strongly disagreeing.

Question 15 offered students an open-ended answer box to express their over all impression of Moodle. Some students had concerns related to the complexity of the Moodle environment based on the faculty member's design of the course or specific interface issues. Students made clear their preference for only using one LMS on campus, noting that it was difficult to have classes in both WebCT and Moodle at the same time. A consistent theme in the student responses focused on the difficult paradigm shift from WebCT to Moodle. A slight majority of student responses agreed that Moodle was easier to navigate than WebCT and provided little trouble for those using an LMS for the first time. One student suggested, "Moodle has good potential and with a few changes (e.g., grades and email) it could be a really great program." Student participants consistently observed they found Moodle a bit confusing and overwhelming at first, but went on to describe Moodle as a useful instructional tool after becoming comfortable with the environment. The overall data analysis of question fifteen can be found in Appendix IIB.

Faculty Satisfaction:

In the faculty LMS survey instrument, questions focused on issues concerning usability and interface of Moodle. The ITRC encouraged participation of the faculty population because the users of the product need to have a significant voice in this evaluation process in order to make it a meaningful and reflective representation of our larger campus community. Faculty members were selected based on their interest in Moodle or program needs. Their resulting courses had students participating in various levels of online involvement for the Moodle-based sections.

The 15 of 20 faculty members who were in the Moodle pilot participated in the LMS survey. Faculty participants had an opportunity to express their experiences with Moodle via responses to fifteen questions. The survey questions were designed to be similar in nature to those asked of the students to determine their level of satisfaction within the Moodle learning environment:

1. I am comfortable using computer technology.
2. I can easily navigate from one task to another within Moodle.
3. I did not have any difficulty creating class assignments in Moodle.
4. I find the assessment tools in Moodle easy to use.
5. I find the communication tools in Moodle easy to use.
6. I found the Help information useful in Moodle.
7. I have used web-based course software (e.g., WebCT, Blackboard, etc.) before attending this class.
8. I prefer using Moodle over other LMS applications (e.g., WebCT, Blackboard, etc.).
9. I think a training session on Moodle would have increased my success in this class.
10. I was able to post and import grades without difficulty in Moodle.
11. Moodle was straightforward and intuitive.
12. Moodle was used effectively by my students.
13. Overall, I would use Moodle in another course.
14. The organization and sequence of the course was easy to create in Moodle.
15. What is your over all impression of Moodle?

Fourteen of the fifteen questions were rated using a four-level Likert scale (Strongly Agree, Somewhat Agree, Somewhat Disagree, and Strongly Disagree). Rankings of the fourteen items are presented in Chart 2 below. The overall data analysis from each course is available in Appendix IIIB.

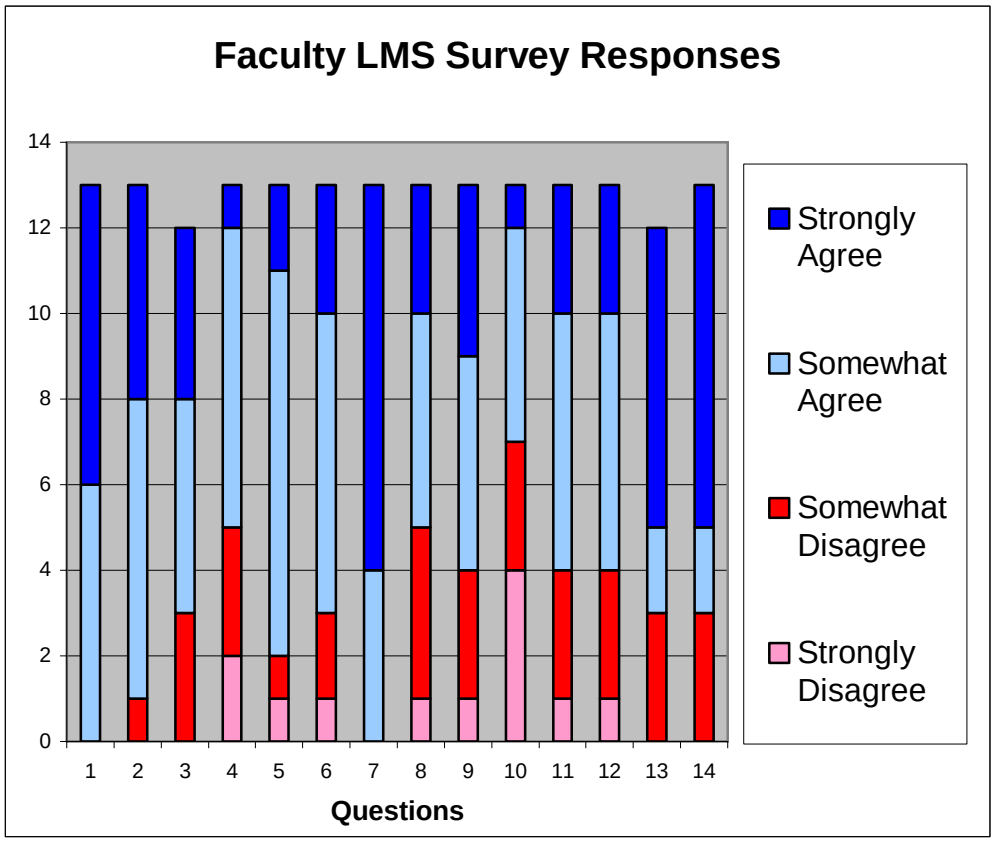


Chart 2: Faculty LMS Survey Results

The first survey question provided information about the comfort of the faculty utilizing computer technology. Faculty (100%) indicated a higher level of confidence in their technology skills then the students. Overall, half of the faculty "strongly agreed" while the other half "somewhat agreed" that they are comfortable with computer technology.

In questions 2, 4, 5, 10, and 11, faculty were asked to demonstrate their level of satisfaction with respect to the usability, ease-of-use, and intuitiveness in Moodle. The majority of faculty (92%) surveyed agreed that navigating Moodle seemed easy, with no faculty member strongly disagreeing. Faculty agreed on the ease-of-use of the assessment tools (63%), communication tools (75%), and grade tools (75%) in Moodle. The overall intuitiveness of the Moodle environment was judged favorably by 70% of faculty participants. Considering a quarter of the faculty were not satisfied with some of the tools and/or aspects of the learning environment, data will be collected in the overall impression responses to determine specific problems that may have influenced their unsatisfactory experience with the Moodle environment.

In questions 3, 12, and 14, faculty members were asked to demonstrate their satisfaction with the pedagogical arrangement and criteria of the instructor's Moodle course. Most faculty (75%) surveyed agreed they had no problem creating class assignments. Faculty (70%) agreed favorably concerning student's effective use of Moodle in their course offering, and even a greater percentage of faculty members (75%) agreed that the organization and sequence of the course was easy to understand within Moodle.

In questions 6 and 9, faculty were asked to demonstrate their satisfaction with the help information and training opportunities in Moodle. A majority of faculty members (77%) surveyed agreed that the help information in Moodle was useful, and only a small percentage of faculty members (8%) strongly disagreed with the usefulness of the help documentation. Faculty (70%) agreed they needed training resources to be successful with Moodle.

In questions 7, 8, and 13, faculty members were asked to determine their experience with other LMS products and their preference and willingness to utilize Moodle. All faculty (100%) members have used web-based course software (e.g., WebCT, Blackboard, etc.) before teaching with Moodle. Of those having used another web-based course system, faculty (62%) slightly favored the use of Moodle over other systems. Faculty (75%) would use Moodle in another course, with no faculty strongly disagreeing.

Question 15 offered faculty an open-ended answer box to express their over all impression of Moodle. A consistent theme in the faculty responses focused on the difficult paradigm shift from WebCT to Moodle. A slight majority of faculty responses agreed that Moodle was easier to navigate than WebCT and provided little trouble for students. One faculty member offered an insight to their comfort with the process by noting, “My frustration is with not knowing all the features and being as comfortable with Moodle as I was with WebCT before unveiling with my students.” Faculty participants consistently indicated that they found Moodle a bit buggy and had concerns related to grading and selective release, but went on to describe Moodle as a useful instructional tool after becoming comfortable with the environment. The overall data analysis of question fifteen can be found in Appendix IVB.

Correlation of Student and Faculty Responses:

In student and faculty responses of the LMS survey instrument, questions focused on issues around usability and interface of Moodle. The questions for both groups were designed to be similar to determine relationships in the data collected. Consistency in question format can be identified in questions 1, 2, 4, 5, 6, 7, 8, 9, 11, and 13. For the most part, faculty (79%) and students (78%) favored Moodle when responding to these questions. The other questions (i.e., 3, 10, and 12) were designed to allow users (i.e., faculty or students) to reflect on their specific contextual interpretation of the Moodle based on their respective user roles.

In question 3, faculty members were asked about creating class assignments and students were asked about completing class assignments. Students (84%) agreed they were comfortable about completing assignments, and faculty (75%) agreed they were comfortable creating class assignments within Moodle. There was a positive correlation between faculty reporting that they were not comfortable with creating class assignments (25%) and students not being comfortable completing assignments.

In question 10, students were asked about the challenges of the accessing grades and faculty members were asked about posting and importing grades. Students (75%) agreed they were comfortable with this process, while fewer than half of the faculty (46%) agreed in their comfort with posting and importing grades. Students (25%) who reported not being comfortable with accessing grades were directly connected to the courses and the faculty (54%) with problems with the Moodle grading system had a direct impact on those students as identified in Appendix IB and Appendix IIIB.

In question 12, faculty members were asked if Moodle was used effectively by their students and students were asked if Moodle was used effectively by their instructor. Students (92%) agreed that Moodle was used effectively by their instructor, and faculty (70%) agreed that Moodle was used effectively by their students. Faculty (30%) who reported students didn't use Moodle effectively also included the students (8%) reported the instructor not using Moodle effectively. This can be identified in four courses where instructors reported students not using Moodle effectively.

Recommendation:

Based on the data collected from the student and faculty results, the ITRC proposes to expand the Moodle pilot into spring 2007 from 20 to 50 faculty members. The data collected was important in determining both successes and difficulties in employing Moodle. Additional help resources will be developed to support faculty and students with the areas identified as problematic or make design changes to support user needs. The same LMS survey instruments will be used with each course in the spring 2007 to evaluate levels of student and faculty satisfaction. In some cases, a control group will be utilized to compare criteria of those working with the same course in WebCT.

Information Technology Services (ITS) has been closely involved in the process of determining hardware and interface options with data retrieval and submission. One recommendation includes the ability of the LMS product to interface with the soon to be selected ERP system. A recommendation has been made by ITS not to finalize the LMS decision before an ERP is selected by the University. The leading ERP products have been successfully implemented with both WebCT and Moodle at other Institutions, but any final decisions will not be made until March of 2007. The LMS Pilot will be completed by April of 2007 with a final recommendation before end of the spring 2007 semester.

The most current Moodle application will be installed on a larger SUN production server and a similar server will run the database (i.e., MySQL) to provide pilot courses with an environment to expand this evaluation process. The larger production servers will replace the smaller single server design utilized in the fall 2006 semester. The server will be housed in Information Technology Services; ITS will provide support for the operating system, hardware, and telecommunications of this system. The ITRC will use its limited resources to install and manage the Moodle software during the prototyping stage. During fall 2006 an LMS Administrator position was created to support future efforts of the University's LMS mission requirements (whether with respect to final adoption of Moodle or WebCT). This position was filled in October of 2006. Once a LMS is selected and determined, the LMS administrator's responsibility will focus on a single application.

The future direction of web-based, instructional technology resources provided by our chosen LMS will depend on the success (or lack thereof) while prototyping courses in spring 2007. The information collected will provide the University with the appropriate evaluation information needed to invest in a future LMS. At the conclusion of this evaluation in spring term, 2007, the ITRC will report on the prototyping process and recommend whether ISU should (1) move all current WebCT courses to the Moodle LMS, or (2) continue our investment in WebCT.

Appendix IB

Student Survey Result by Courses (Questions 1-14)

RESPONSE	COURSENAME	I_AM_COMF Q1	I_CAN_EA Q2	I_DID_NOT Q3	I_FIND_AS Q4	I_FIND_CC Q5	I_FOUND_ Q6	I_HAVE_U Q7	I_PREFER Q8	I_THINK_T Q9	I_WAS_AB Q10	MOODLE_ Q11	MOODLE_ Q12	OVERALL_ Q13	ORGANIZA Q14
1	ACAD 102 - 09	a	b	b	b	a	c	b	b	c	c	b	a	a	a
2	ACAD 102 - 09	a	b	b	b	c	b	b	b	b	b	b	a	b	a
3	ADRN210	b	c	c	b	b	b	a	d	f	b	c	a	b	b
4	ADRN210	a	b	b	b	b	b	a	b	c	a	b	b	b	b
5	ADRN210	a	b	b	c	c	d	a	e	d	c	c	b	d	c
6	ADRN210	a	b	b	b	d	c	a	d	a	d	c	b	b	c
7	ADRN210	a	a	a	b	c	b	a	d	c	b	b	b	c	b
8	BA 200	b	a	b	a	a	a	a	b	a	b	b	a	b	b
9	BA 301	b	a	a	a	a	a	a	b	b	a	a	b	a	a
10	BA 400 Professio	a	b	b	b	b	b	a	d	c	b	b	b	c	b
11	BA 400 Professio	a	a	a	a	a	a	a	a	d	a	a	a	a	a
12	BA 400 Professio	a	b	b	b	b	b	a	b	c	b	b	b	b	b
13	BA 400 Professio	b	b	a	b	b	c	a	a	b	a	b	b	a	a
14	BA 400 Professio	b	c	c	b	c	c	b	d	c	a	c	b	c	c
15	BA 400 Professio	a	a	a	a	a	a	a	b	b	a	a	a	a	a
16	BA 400 Professio	a	b	a	b	a	b	a	d	a	a	b	a	b	a
17	BIOL 101	a	a	a	a	b	c	b	c	a	b	c	b	b	c
18	BIOL 101	a	b	a	b	b	a	a	e	b	c	c	b	d	a
19	BIOL 101	a	b	b	a	b	b	a	b	c	b	c	b	b	c
20	BIOL 101	a	a	b	a	a	a	b	a	c	a	a	a	a	a
21	BIOL 101	b	a	b	a	b	b	a	b	c	a	b	a	a	b
22	BIOL 101	a	a	a	a	a	a	d	b	d	a	a	a	a	b
23	BIOL 101	a	a	a	a	b	a	a	a	b	a	b	a	a	b
24	BIOL 101	a	a	b	a	a	a	a	b	b	b	b	a	a	a
25	BIOL 101	a	b	b	b	b	b	a	e	b	a	b	a	b	b
26	BIOL 101	a	a	a	a	a	a	a	b	d	b	a	a	a	a
27	BIOL 101	a	a	a	a	a	b	a	b	d	a	b	a	a	b
28	BIOL 101	a	c	b	c	d	c	a	e	a	c	c	b	c	d
29	BIOL 101	b	b	b	b	b	b	b	b	b	c	b	a	a	b
30	BIOL 101	a	b	b	b	b	b	a	c	a	b	b	b	b	b
31	BIOL 101	b	b	b	c	c	c	a	d	b	c	c	b	b	b
32	BIOL 101	b	b	b	b	f	f	b	b	a	b	c	b	b	c
33	BIOL 101	b	b	a	b	b	b	a	c	b	a	b	a	b	b
34	BIOL 101	a	c	a	b	b	a	a	b	b	b	b	a	a	a
35	BIOL305	a	a	b	a	b	b	a	b	c	b	b	b	a	a
36	BIOL305	a	a	a	b	b	b	b	b	b	a	a	a	a	a
37	BIOL305	a	a	b	a	b	b	a	b	c	a	b	a	a	b
38	BIOL305	a	f	f	f	f	f	f	f	f	f	f	b	b	b
39	BIOL305	c	c	c	b	c	b	a	b	b	c	b	f	b	b
40	BIOL305	a	a	a	a	a	a	a	a	c	a	b	a	a	a
41	BIOL305	b	a	a	b	b	c	a	a	c	a	b	a	a	a
42	BIOL305	a	b	a	b	c	a	a	d	c	a	b	a	a	b
43	BIOL305	a	a	a	a	a	a	a	b	b	a	b	b	b	b
44	BIOL305	a	a	a	a	a	b	a	b	b	a	b	a	a	b
45	BIOL305	b	b	c	b	b	b	a	b	c	c	b	c	b	b
46	BIOL305	a	a	a	c	b	b	a	b	c	a	b	a	a	b
47	BIOL305	a	a	b	a	a	a	d	c	b	a	b	a	a	a
48	BIOL305	b	d	c	c	d	b	a	e	b	c	d	b	d	d
49	BIOL305	a	b	b	b	b	b	a	b	c	b	b	a	b	b
50	BIOL305	b	a	a	a	a	b	a	a	b	a	b	a	a	a
51	BIOL305	a	a	a	a	a	a	a	e	c	a	a	a	c	a

52	BIOL305	b	b	b	b	b	f	a	b	c	a	b	b	b	b
53	BIOL305	a	a	a	a	a	a	a	a	a	a	a	a	a	a
54	BIOL305	a	c	c	b	d	b	a	d	d	c	c	c	c	b
55	BIOL305	b	b	b	b	d	b	d	b	b	b	b	b	b	b
56	BIOL305	a	a	b	c	b	f	a	a	d	c	b	b	a	b
57	BIOL305	a	b	b	b	b	b	b	b	b	b	b	a	b	b
58	BIOL305	b	b	b	b	b	b	a	b	b	b	b	a	b	a
59	BIOL305	c	c	c	c	c	c	a	e	b	c	c	c	c	c
60	BIOL305	a	b	b	b	b	a	a	b	c	d	b	a	b	b
61	BIOL305	b	b	c	c	b	b	a	e	a	b	c	b	c	b
62	BIOL305	a	a	b	a	a	c	a	e	a	b	b	b	c	b
63	BIOL305	b	a	a	a	b	b	a	b	b	a	b	b	b	a
64	BIOL305	a	a	a	b	b	a	d	c	b	a	a	a	a	a
65	BIOL305	a	b	a	a	a	b	a	a	b	a	a	a	a	a
66	BIOL305	b	b	b	b	b	b	a	b	b	b	b	b	b	b
67	BIOL305	b	b	a	a	b	b	a	b	c	b	b	c	a	a
68	BIOL305	a	a	a	a	c	b	a	b	b	a	a	a	a	b
69	BIOL305	b	b	c	b	c	b	d	c	a	b	c	b	c	c
70	BIOL305	a	a	b	a	b	b	a	a	d	b	b	b	a	a
71	BIOL305	a	a	a	a	a	a	a	a	a	a	a	a	a	a
72	BIOL305	a	a	a	a	b	c	a	e	d	d	c	a	c	b
73	BIOL305	b	c	c	c	c	d	a	e	a	b	c	b	d	c
74	BIOL305	a	b	a	a	b	c	a	d	b	c	b	a	b	b
75	BIOL305	a	a	a	b	a	b	a	b	c	a	b	a	b	b
76	CIS 301	a	c	a	b	b	c	c	a	b	b	b	a	b	b
77	CIS 301	a	b	a	a	a	b	a	a	b	b	b	a	a	a
78	CIS 301	a	a	a	a	a	b	a	a	c	b	a	a	a	b
79	DENT201	c	b	a	b	c	b	a	e	a	a	b	a	d	b
80	DENT201	a	a	b	a	a	a	a	a	c	a	b	a	a	a
81	DENT201	b	b	a	a	b	a	a	b	c	a	a	a	a	a
82	DENT201	a	b	a	a	c	b	d	d	d	a	b	a	b	a
83	DENT201	a	a	a	a	b	a	a	b	c	a	b	b	b	b
84	DENT201	a	a	a	a	a	a	b	a	b	a	a	a	a	a
85	DENT201	b	a	a	a	b	b	a	d	b	a	b	a	b	b
86	ECON202	b	b	b	b	b	b	a	b	b	b	b	b	b	b
87	ECON202	a	b	b	b	c	b	b	d	c	d	c	b	b	a
88	ECON202	a	a	a	a	a	a	a	c	d	a	a	c	a	b
89	ECON202	b	d	c	d	d	d	a	e	b	d	d	c	d	d
90	ECON202	a	a	b	a	b	b	a	a	c	a	a	a	a	a
91	English 101-12	a	a	a	b	b	a	d	a	b	a	a	a	a	a
92	English 101-12	b	b	b	b	b	b	b	b	c	c	b	b	b	b
93	English 101-12	a	a	a	a	b	b	a	b	c	b	b	a	a	b
94	English 101-12	b	b	a	b	b	c	a	b	c	a	b	a	a	a
95	English 101-12	c	b	c	f	c	b	b	c	b	d	c	b	b	b
96	English 101-12	a	a	a	b	a	a	d	b	d	a	a	a	a	a
97	English 101-12	b	a	b	a	b	b	b	a	c	b	b	a	a	a
98	English 101-12	a	a	a	a	a	a	c	a	b	b	b	b	b	a
99	English 101-12	c	c	c	b	b	a	b	d	a	d	c	d	c	b
100	English 101-12	b	a	a	a	a	b	b	b	c	b	b	b	a	a
101	NURS633	a	c	c	c	d	c	a	e	a	f	d	b	c	c
102	NURS644	b	c	b	c	c	d	a	e	c	b	d	b	d	d
103	PA CY	a	a	b	a	b	b	b	d	b	b	b	b	b	b
104	PA CY	b	b	c	b	d	b	a	d	c	d	c	b	c	c

105	PA CY	a	d	d	b	d	c	a	e	b	c	d	d	d	d
106	PA CY	a	a	a	a	a	b	f	a	b	c	c	b	b	b	b

f	Did Not Answer	0	1	1	2	2	5	1	1	2	2	1	1	0	0
e	Not Applicable	0	0	0	0	0	0	0	8	0	0	0	0	0	0
d	Strongly Disagree	0	3	1	1	9	4	8	16	12	8	5	2	8	5
c	Somewhat Disagr	5	12	15	11	16	16	2	16	36	16	20	6	14	11
b	Somewhat Agree	33	41	39	45	49	52	17	44	40	35	60	42	39	50
a	Strongly Agree	68	49	50	47	30	29	78	21	16	45	20	55	45	40
Total		106	106	106	106	106	106	106	106	106	106	106	106	106	106

f	Did Not Answer	0	1	1	2	2	5	1	1	2	2	1	1	0	0
e	Not Applicable	0	0	0	0	0	0	0	8	0	0	0	0	0	0
d	Strongly Disagree	0	3	1	1	9	4	8	16	12	8	5	2	8	5
c	Somewhat Disagr	5	12	15	11	16	16	2	16	36	16	20	6	14	11
b	Somewhat Agree	33	41	39	45	49	52	17	44	40	35	60	42	39	50
a	Strongly Agree	68	49	50	47	30	29	78	21	16	45	20	55	45	40

Appendix IIB

Student Survey Result by Courses (Question 15)

Student Survey Overall Impressions

Response #1: Very good educational tool

Response #2: I though that the program has good potential and with a few changes in a few parts of it it could be a really great program. The was grades were set up was dificult to understand. It should not require you to put in a subject to your email before you send

Response #3: It was sometimes hard to navigate, but I think I just need more practice with it. I do, however, prefer WebCT

Response #4: I think it will be easier to use once I get more used to it. I haven't had too much trouble with it.

Response #5: webCt is much easier and more efficient to use. In Moodle you have to click in several places to get where you need to be. Also WebCt is much better in the fact that you have your home display which alerts you if you have mail, grades have been posted, ect. In Moodle you just have to check it every time. Overall I would be very disappointed if ISU switched their whole system to Moodle. The instructors have stated it is much easier to use on their end but what we really need to determine is if it helps the students and I believe the answer to this question is no!

Response #6: It took a long time to figure out how to navigate moodle. getting my grades and using the message tool are still confusing. there is no way to send a private message is there? every thing you post and every message gets sent to everyone in your program. I think it would have helped tremendously to have some orientation. at this point I would choose web ct or blackboard over moodle. I guess it's easier to stay with what you know.

Response #7: I have used WebCt for other courses and really like the discussion and communication tools in webct. I like the tool bar in moodle because it has the options of spell check, etc for use in assignments. My guess would be that if I had not had any experience with another system,such as webct, I would have been able to do things better in moodle. All-in-all, it is not a bad system.

Response #8: I like moodle better than web CT because the information for the course is easier to find.

Response #9: i really like "moodle."

Response #10: Moodle was fine, but I actually prefer WebCT better only because I find it less busy and easier to quickly access the information. However, I know that WebCT is extremely restrictive for the instructors, so at the end of the day, it is whatever the instructors find more useful.

Response #11: Very easy to use, very nice navigation, much more appealing than webCT. Liked the wiki and the discussion forums, very useful.

Response #13: good stuff

Response #14: To be honest, I really do not care for this program and if the Business Dept is going to use a program like moodle, webct or ect, then ALL Business instructors should use the same program!!!

Response #15: I like Moodle and the format a little better than webct. It's easy to use and easy to navigate. I think someone could use it even without any trainging at all.

Response #17: With no experience it was very confusing and frustrating in the beginning.

Response #18: I like the way Web CT is set up more then the way Moodle is set up. With Web CT you can veiw all your classes at once. The way moodle is set up i have classes in both moodle and web ct, witch makes it a pain in the but to keep track of everything. Overall Moodle is not as easy to navigate in as Web CT is.

Response #19: I think the structure is sometimes confusing. The calendar could be less cluttered and simplified. When an assignment is due and when it is available. Why does it show lecture/chapter quizzes with two drop down options? It would be nice to go to one place and see assignment submissions and grades, if any. It would be sort of a progress report to date.

Response #20: I liked Moodle a lot more than Web CT and would use it in the future for classes again. I do not like Web CT.

Response #21: B+ over all. Would be nice if the real player had a larger view

Response #22: My over all impression of Moodle is that it is convienent and easy to use.

Response #23: moodle is a lot different than web ct but after getting used to where things were and being familiar with moodle it became user freindly. I would take another class using moodle.

Response #24: I would like for moodle to try and maybe make the lectures with the teacher a little bigger. I can't read a lot they she writes on the overhead. A lot of it was really blurry.

Response #25: Its not that bad, just a lot different from Web CT and that takes time to get used to.

Response #26: good

Response #27: I think moodle is pretty simple to navigate through. The only thing that I have not liked about moodle is that there is too much information that can be displayed on the home page of the course. It always looks like I have ten times more things to do than I really do because half of the stuff listed on the home page I have already completed and is no longer available. I think that only stuff that is still available should be listed on the home page.

Response #29: It's better than WebCT. It does take a couple weeks to feel comfortable using it, though.

Response #31: I think they need to decide what they are going to use, either Moodle or Web CT. It's hard to have classes in both, due to I have to log into two different web sites. It seems to take Moodle forever to come up before I can actually get started. I am starting to get the hang of Moodle, but learning Web CT was a lot easier, it seemed more organized.

Response #32: Moodle is better than Web CT, but there is still stress. I'm not sure if I make a mistake, so I must ask. I have much trouble with the questions because of English, not biology.

Response #33: After a couple of weeks in moodle I got the hang of it. I thought it was fairly easy to use, however seeing all the chapters and assignments up at one time makes me feel a little overwhelmed and makes me wonder if im behind or if im right in track with everything.

Response #34: I liked Moodle. It seems it's been a long time since I used Web CT. I didn't know anything about Moodle until I choose this class. If I had to take another class on-line I would feel comfortable using it. I like taking these classes on line it is way more convient. I would have liked to know something about Moodle before hand. But once I got the hang of it I was comfortable.Thank you Erika

Response #35: The main benefit of moodle is the flexability to do things for patho. Trying to see what exactly my grade is kind of confusing but not to difficult to figure out. I've emailed my instructor a couple times and never got a response. I'm not sure if she didn't get my message or what. I wish there was an optional study group like my other biology classes have had. Overall I don't mind using moodle and would not mind taking it for another class.

Response #36: suggestion- It would be nice to be able to close out the topics on the home page that we are done with. Currently we can leave it all open, or close everything but the one we pick. l It would be better if we could choose individually which chapters to close and which to stay open.

Response #37: Except for difficulties in viewing things on my home PC at the beginning, I have felt very comofrtable using this program. I occasionally have had difficulties with the streaming video freezing up, like a stuck record, and had to restart the video. As I've explored the various locations I have become more comfortable with it. I think it's a great way to take a class, especially one that requires extensive note taking. I love being able to replay a lecture when needed.

Response #38: Overall, after the first couple of days or so of using it, I would say that it is a great program. Once all of the students and the instructor picked up on how to use the program, I think it works great. Dr. B's instructions and the videos on how to use Moodle helped a lot too.

Response #39: I think that i would be able to find things easier in moodle now that i have used it. it was not easy at first and out teacher had to set due dates back a few times because of some problems.

Response #40: I like the program, its easy to use. I wouldn't mind taking another couse through moodle.

Response #41: I like moodle. It is a little annoying, but not a problem that I have to click on the log in button twice for it to log me in. The introductory videos were helpful, but they were too small. I couldn't see what was going on or read any of the buttons and they moved too fast which was frustrating. Luckilly, I have found it easy to use once I got in and started clicking. I have been impressed with the ease of submitting assignments, taking quizes, navigating through the videos and communicating with my professor. It is a little hard to find the old messages though, although I have been able to do with with a little bit of effort. The communication and old messages tools could be made a little easier to use, but ultimately it has not inhibited my learning abilities. I would definately support moving from webCT to moodle because I think it offers more tools that make learning easier.

Response #43: At first I had a little trouble finding everything I needed to access on Moodle, but once I found everything, it was pretty easy to navigate.

Response #44: I like it. I had no problems.

Response #46: It is unfortunate that Internet Explorere could not be used as the browser for this course. The gradebook could be visually more organized for easy reading.

Response #48: Not user friendly!!!

Response #49: It's okay. Moodle was a little complicated at times but once I got used to it, it was alright.

Response #50: I have taken a lot of online classes and have enjoyed using Moddle over Web CT.

Response #51: I would've rather used WebCT

Response #52: I was very leery of Moodle at first, but overall, Moodle has been fine-I have used Blackboar in the past and had no problem with it, once I became accustomed to it. The same goes for Moodle. Cindy Rovera

Response #53: Its been better than using blackboard more easily user friendly.

Response #54: I like the way I can see the sequence of the course, but it would be good to have "quick links" to, for example, a list of all assignments and their due dates, and a list of all grades to date. The calendar feature is helpful but sometimes contains broken links, or (worse) a due date is missing altogether. I consider myself very computer literate and I feel that the "learning curve" for Moodle is much steeper than for most other computer programs.

Response #55: At first Moodle was awful, it was hard to figure out and I had problems getting it to work. Once I figured it out it wasn't so bad. I still have problems making the lecture videos run smoothly. They will work OK for a while then the audio and visual gets distorted and eventually it will freeze up or get stuck on the same sentence. I have to exit out of the program, get off the internet and enter all over again sometimes three to four times a lecture video which are not usually longer that 15-20 min. It makes listening to the lecture videos very long and getting into and out of the program to make it get throught the essential lecture a waste of time. A lecture video which should take 10-15 min takes 20-30. I called my internet company to see of it was the internet, they assured me it was an error on the ISU Moodle web page. Over all Moodle was a good experience except the interupted lecture videos.

Response #57: It was awkward at first, because there were too many places to lookto place the assignments. Everything is going smoothly now.

Response #58: It is a bit overwhelming at first, so many places to go and another dang set of usernames and passwords. Overall, I think it's pretty sophisticated. I don't like staring at the computer for endless hours of lecture videos because I like to look at the person who is talking and yet the instructor becomes the incredible shrinking woman. Her lecture content is very good and she makes it interesting. I like the way she writes while she's lecturing, that makes it better. I'm an interactive learner so the absence of the classmates and instructor is a bummer for me. Actually though, it' a very cool thing the invention of Moodle but it makes me navigate 4 sets of usernames and passwords to get around ISU.

Response #60: I think it would be helpful if there was a way for each student to individaully keep track of assignements on moodle- as in a checklist to mark off when things are done, etc. That is what is hard to keep up with and it is a pain to go all the way through the tools to see you did submit something.

Response #61: Moodle is too complex. There are too many links and pages and forums that are spread out. It took me a little while to even find were my movies were that I needed to watch on the lectures. I think WebCT is easier because it is not as complex.

Response #62: it is alright I think that WEBCT is better though.

Response #64: good layout, easy to navigate and understand.

Response #65: Moodle was a pretty good tool for the online learning enviornment

Response #66: Moodle is okay once you get it figured out.It's a little more difficult than webct, but its not bad.

Response #67: It works okay. It took a bit to get used to it but not too difficult. I just think we need to use one system not two or three.

Response #68: good

Response #69: after the beginning troubles, i'll stay in the somewhat agree to neutral area. thanks anyway!

Response #70: I like it better than other online course designs... The email part of it could be easier, or have better instructions. I find it difficult to find email responses without having to read all of the messages I sent before...

Response #71: Very Convienent

Response #72: It is an okay system to use, but I found it much more difficult to use than both WebCT and Blackboard. I am currently enrolled in 3 other online classes, all of which are using Web CT. I find navigating my way through WebCT alot easier than Moodle. If I were taking another class that was offered on both Moodle and WebCT, I would definately pick WebCT.

Response #73: didnt understand how to use it very well.

Response #75: I like it better than web ct and it has a good format just takes a while to get used to.

Response #76: I don't know why, but it would never let me log into Moodle. It would always tell me that I needed to reset my password. The only way I found to get around it was to go to my e-mail and click into Moodle from a discussion e-mail I received from a professor regarding an assignment or something. It was extremely frusterating and I don't know why it wouldn't let me.I think a few of these questions should've had a neutral option instead of only "somewhat agree" or "somewhat disagree.Numbers 6 and 7 are the ones that come to mind for me.

Response #77: I have courses on Moodle and WebCT, and I much prefer Moodle. WebCT seems to have server and other tech glitches too often for me to have much confidence in it. And, I find that Moodle is easier to navigate. After all USER FRIENDLY is what it's all about when it comes to assignments and quizzes! RBM

Response #78: Far and away better than WebCT in most every respect. Please, please, please adopt this ASAP!

Response #79: I have not cared for it as much as other programs, but it could mostly be because I have already used Blackboard and have had the opportunity to learn it well with a professor to show how to access everything.

Response #80: I have enjoyed the class, because the course has been very well organized. Moodle has been easier to navigate compared to WebCT. The only time I have had a problem with a quiz, was when I didn't read the directions correctly. Moodle should be a successful asset to online classes.

Response #81: I really like using moodle. It is easy to follow and find things. I think that having a good instructor who lets you know whats going on and is helpful makes a big difference, which I do have a good instructor.

Response #82: I have two other classes online in WebCT this semester. I prefer to use that setup, over Moodle. However, if given the option of taking a course online or on campus, I would choose online, in Moodle or WebCT. This class has been very educational and most of the time it is easy to find what I am looking for. However, once in a while I struggle to find what I need.

Response #83: I think working with moodle has been a good experience so far. I don't have any complaints about it...just taking an online course is a new experience for me so I am just nervous about doing everyhting right, but moodle has not been difficult at all.

Response #84: I've really enjoyed this class, and the way it was taught. It was easy to use and I did not have a problem.

Response #85: I don't have any major problems with the moodle. The e-mail situation was a bit confusing for me. I am still not sure how to look at my mail with in the moodle. I have only recieved it in my regular e-mail. I like the set up of WebCT much better, it is less confusing.

Response #86: It is fine. Honeslty for the amount that most students use it, it is neither more or less effective than web ct

Response #89: Hard to figure out

Response #90: I liked moodle a lot more than anything else! I hate WebCT a lot!

Response #91: i think it is an excellent organization tool that makes assignements easy to complete.

Response #92: I think that using moodle was alot easier than webct and easier to understand. once you get the hang of it. I would agree touse it in the future in another class. do whatever it takes to keep it.

Response #93: it's ok

Response #94: IT is pretty self explanitory and doesn't take much computer knowledge to understand how to navigat in moodle.

Response #95: At first it was hard to understand, but after a week i got the hang of it. It's pretty usfull I think.

Response #96: I found moodle very easy to use!

Response #97: I think that it is a good tool. It should be used intstead of WEbCT. I think that it is easier to navigate than WebCt and it doesnt have any problems.

Response #98: it was simple enough to learn in a few minutes

Response #100: It is a very useful tool to have. I was able to get my assignments on time, and It was easy and very clear when I used it. Overall it is a great tool, and I would be comfortable using it for my other courses.

Response #101: Moodle is Too busy No spell checks in this tool

Response #102: I feel it is difficult to navigate and very difficult to see what new postings are in the forum discussions because of the way they are posted. If people are replying within replies there's no way to identify if it is new to the discussion.

Response #104: It's hard to begin a new program when you've been using the same one for 3 years (1 year in other's cases). I find that the home page seems really "busy" and it's difficult to find things sometimes. If you were beginning with Moodle, like any other program, I think you would learn it well and become comfortable sooner than those that have to switch one mindset to another

Response #105: Moodle is awful. The main page is so jumbled up you can't find anything. Also, I'm very unhappy that we were chosen to be the guinea pigs on this one. We're off site and are doing clinical rotations which means during normal business hours, we're working. When we can't figure out moodle, it's difficult to just call and ask. This is the main mode of communication we have with the school. So, it's pretty frustrating to be using something we're not comfortable with. Plus, while working around 80 hours a week at clinical sites, I don't really have any free time to waste with Moodle. I think it would have been perfectly appropriate to use moodle had we used it during the didactic year. I'm very disappointed that we had no imput in the decision to use Moodle this year.

Appendix IIIB

Faculty Survey Result by Courses (Questions 1-14)

		I_AM_COM	I_CAN_EA	I_DID_NO	I_FIND_AS	I_FIND_CO	I_FOUND_	I_HAVE_U	I_PREFER	I_THINK_T	I_WAS_AE	MOODLE_	MOODLE_	OVERALL_	ORGANIZA
Respond	COURSEN	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
1	Moodle Pil	b	b	c	b	b	a	a	b	a	c	b	a	a	a
2	Moodle Pil	a	a	a	b	a	a	a	a	c	b	a	a	a	a
3	Moodle Pil	a	b	b	d	d	b	a	b	c	d	c	b	a	b
4	Moodle Pil	b	b	c	d	b	d	b	d	c	d	c	c	c	c
5	Moodle Pil	a	a	b	b	b	b	a	b	b	d	b	b	b	a
6	Moodle Pil	b	c	c	c	b	c	b	c	b	c	d	c	c	c
7	Moodle Pil	a	a	a	b	b	b	a	a	b	c	b	b	a	a
8	Moodle Pil	a	b	b	b	b	b	a	b	a	b	b	c	a	a
9	Moodle Pil	b	a	a	a	a	a	b	a	b	a	a	b	a	a
10	Moodle Pil	b	b	b	b	b	b	a	c	a	b	b	b	b	b
11	Moodle Pil	a	b	a	b	c	b	a	c	b	b	a	a	a	a
12	Moodle Pil	b	b		c	b	c	a	c	a	d	c	b		c
13	Moodle Pil	a	a	b	c	b	b	b	b	d	b	b	d	c	a
d	Strongly Di		0	0	0	2	1	1	0	1	1	4	1	1	0	0
c	Somewhat		0	1	3	3	1	2	0	4	3	3	3	3	3	3
b	Somewhat		6	7	5	7	9	7	4	5	5	5	6	6	2	2
a	Strongly A		7	5	4	1	2	3	9	3	4	1	3	3	7	8
Total			13	13	12	13	13	13	13	13	13	13	13	13	12	13
d	Strongly Di		0	0	0	2	1	1	0	1	1	4	1	1	0	0
c	Somewhat		0	1	3	3	1	2	0	4	3	3	3	3	3	3
b	Somewhat		6	7	5	7	9	7	4	5	5	5	6	6	2	2
a	Strongly A		7	5	4	1	2	3	9	3	4	1	3	3	7	8

Appendix IVB

Faculty Survey Result by Courses (Question 15)

Faculty Survey Overall Impressions

Response #3: At this point there are still bugs in Moodle that need worked out. For example, we need the ability to input grades manually and to allow selective release of certain activities. Overall, I would say that, once the bugs are worked out, Moodle will be great.

Response #8: I like the layout of moodle and I feel it is much easier to edit and alter materials in Moodle if it has been placed in the correct format. My frustration is with not knowing all the features and being as comfortable with the LMS as I was with WEBCT before unveiling with my students. I think that students will find it more intuitive once they do not have the crutch of WEBCT to compare to. It will be interesting to see how students who have never used another LMS feel about Moodle. One other comment I would like to make is that the ITRC staff have been outstanding throughout this whole process. Each one of them have done everything to make this transition less painful and have come to my rescue several times. They are willing to spend the time and are very patient with those of us who are not as "techie" as they.

Response #7: Generally, I like it. I like the Wiki, and assignments are easier to setup than WebCT. However, there are some flaws in the assignments function. Moodle only let's students upload a single file for an assignment, and I had to figure out how to work around the inability to return assignment files to students. But I like it's flexibility in other areas.

Response #2: Excellent overall, with almost no problems from the student side that they have reported thus far (a couple of login glitches initially, occasionally missing or getting confused about responding in a forum or to a task prompt). Would like the ability to manually override the grading cells & items. A couple of the system "defaults" seem odd, such as the one that makes grades for individuals in forums visible to all (by default). On the whole, though, very easy to adopt to, VERY flexible for both creating content and uploading it, very FAST & RESPONSIVE, does not require 20 clicks to accomplish any task, and enjoyable to use in different ways (such as the options for course organization). Also, the ways in which Moodle allows for viewing student information, postings, and assessment tools is very helpful. So far, so good -- I'm curious to see how the students are responding.

Response #11: I haven't done everything in Moodle yet, but would be fine with switching to it. I dont like the way it interfaces with ISU mail, and this makes it difficult to track participation if students choose to have every forum message delivered to ISU mail in its entireity. but nothing has been unworkable yet.

Response #9: I liked it. The overall look is good. Also it was easy to use for the most part. Whenever I was confused, reading the online documentation helped. I thought it was easier to use than WebCT. Moodle required fewer clicks and was more intuitive. It was more obvious on what to click on when working in Moodle.

Response #12: If it were easier to manage the grading system, being able to edit grades, input grades and etc... this learning system would be fine. Setting up message and forums with student are a bit tedious and have posed problems. We have had problems with students receiving e-mails with other students grades and not their own. This problem to the best of my knowledge has yet to be resolved. I understand that we are all on a learning curve with Moodle and I do think there is some very strong potential for this learning system to work very well. From student feedback, they seem to have an easier time with Moodle than with other learning systems... but they too are in a learning curve switching between two different ones at the present time.

Response #6: it is not user friendly for all of the different ways that instructors grade and assess their students.

Response #10: It was OK. It has some nice features over WebCT, but I find the Homepage cluttered. The daily posting of discussion is a nice feature. I do get a bit confused with both messaging and email. Students have been confused and sent both messages and email. I have responded to email and then missed messages because I did not open the course for a day. There are numerous features I have not tried (like Wikis) because I don't have time to learn about them. Some training before teaching again might be helpful. The help information doesn not always give me the exact instructions I need. Although I am comfortable with computers, I am not the most techn savvy person and need very clear directions.

Response #4: It's OK for some things but I've had some serious problems that could not be solved.

1. The gradebook is a huge problem. If we adopt Moodle it must be fixed right away. In fact, I need it fixed before the semester is over or I have to do grades some other way... creating a lot of extra work for me.
2. The quiz scoring is unpredictable.
3. The students have had problems seeing that there were new postings. My students have complained about Moodle quite a bit asking to move to WebCT like their other classes.
4. A couple times I got error messages when sending email to students from Moodle. I had my course set to prevent them from turning off email forwarding but twice I wasn't able to send messages to individual students and couldn't figure out why.
5. Several times when I uploaded a revised version of a file the old one would remain, as if the new one wasn't uploaded. I had to upload the file several times to get the new version to stick.

Response #1: WebCT was more familiar, thus easier to use. Moodle will become the same. I do like the assignment tools and the ability to inline grade them. I have not yet worked with the grading much. I think a "class" tyupe setting where the facilitator did practices with, "This is how you send a quickmail to students, this is how you send a message to select or the entire class, this is how you grade from the assignment tool, this is how you add announcements (forums) and then save them as "previous announcements" like WebCT, etc." Yes, it would have been basis for many faculty but it would have given an opportunity to then say, "Oh, I know how to do that but what if. . . " As usual, all someone need do is set up a time with any of the ITRC staff and all concerns can be managed.

Response #13: After the learning curve it is actually pretty good to use. Selective Release is needed (I know you know that) - and an e-mail system like webct that doesn't go to my private e-mail. Messages is working - but it was difficult to get students to use this tool at first - now it is working good - but a webct-like e-mail would be better. Gradebook needs work (but I know you know that). I like the book tool, however, I would like to see additional levels. Glossary is good - except I don't like the links in the quiz questions - I have to go through and unlink - it is very difficult. Overall, it has been a good experience.

Appendix III

LMS Spring Pilot Report

LMS Spring Pilot Report

April 2, 2007

Instructional Technology Resource Center
Idaho State University

LMS Spring Pilot Report

Based on the results of the learning management systems (LMS) Fall 2006 Pilot Report, Moodle was selected to be evaluated during the spring semester of 2006 by Idaho State University (ISU) faculty and students. This Spring LMS Pilot Report evaluated feedback from 50 faculty members and 1,200 students who have reviewed the Moodle 1.6 LMS software package. The spring report explains the evaluation methods and interprets the user satisfaction results of the student and faculty participants involved in the pilot.

Student Satisfaction:

In the student LMS survey instrument, questions focused on issues on usability and satisfaction of Moodle. For consistency reasons, the same evaluation instrument was used from the Fall LMS Pilot. Students were selected based on their enrollment in the class by the faculty member to pilot in Moodle. The students who participated in Moodle courses were exposed to various levels of online involvement.

134 of 1,200 students who were enrolled in Moodle courses participated in the LMS survey. Graduate students provided 61 percent and lower-division undergraduate students offered 29 percent of the student population participating in the survey. Each student participant had an opportunity to express their satisfaction with Moodle in a sixteen-question survey. An additional question was added to the fall survey to help determine if the student participated in the fall study. The survey questions were designed to be similar in nature to those asked by the faculty member to determine their satisfaction in the Moodle learning environment:

1. I am comfortable using computer technology.
2. I can easily navigate from one task to another within Moodle.
3. I did not have any difficulty completing class assignments in Moodle.
4. I find the assessment tools in Moodle easy to use.
5. I find the communication tools in Moodle easy to use.
6. I found the Help information useful in Moodle.
7. I have used web-based course software (e.g., WebCT, Blackboard, etc.) before attending this class.
8. I prefer using Moodle over other LMS applications (e.g., WebCT, Blackboard, etc.).
9. I think a training session on Moodle would have increased my success in this class.
10. I was able to view my grades without difficulty in Moodle.
11. Moodle was straightforward and intuitive.
12. Moodle was used effectively by the instructor.
13. Overall, I would use Moodle in another course.
14. The organization and sequence of the course was easy to understand in Moodle.
15. What is your over all impression of Moodle?
16. Did you participate in ISU's Moodle pilot in fall of 2006?

Fourteen of the sixteen questions were rated using a four-level Likert scale (Strongly Agree, Somewhat agree, Somewhat disagree, and Strongly Disagree). A ranking of each of the fourteen items will be presented in Chart 1. The overall data analysis from each course is available in the Appendix IC.

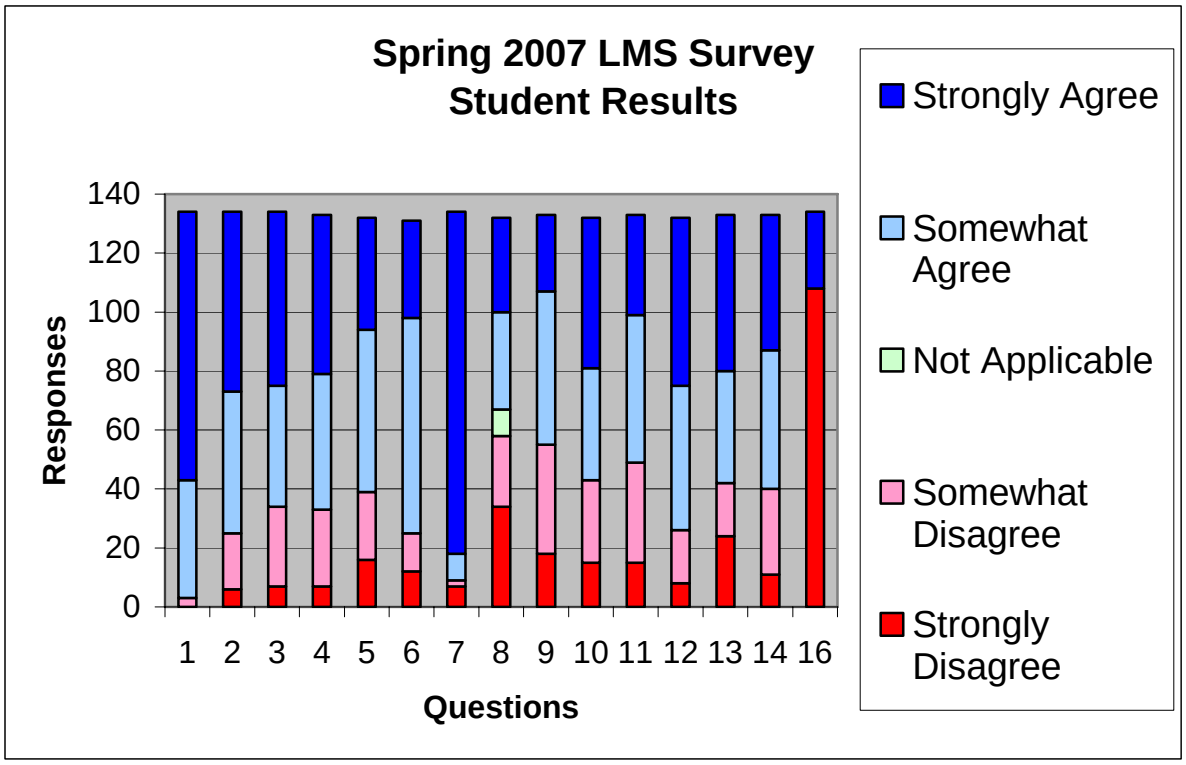


Chart 3: Student LMS Survey Results

The first survey question provided information about the comfort of the student utilizing computer technology. Students involved in graduate level courses indicated a slightly lower level of confidence in their technology skills then students participating in undergraduate division courses. This is opposite of what was reported in the fall pilot. Overall the students agreed they were comfortable with computer technology. No student strongly disagreed with their comfort with computer technology.

In questions 2, 4, 5, 10, and 11, students were asked to demonstrate their satisfaction of usability, ease-of-use, and intuitiveness of Moodle. The majority of students (81%) surveyed agreed navigating Moodle seemed easy with only one percent strongly disagreeing. Students agreed favorably of the ease-of-use of the assessment tools (75%), communication tools (70%), and grade tools (67%) in Moodle. The overall intuitiveness of the Moodle environment was favorable by 63 percent of student participants.

In questions 3, 12, and 14, students were asked to demonstrate their satisfaction of the pedagogical arrangement and criteria of the instructor's Moodle course. Most of students (75%) surveyed agreed they had no problem completing class assignments. Students (79%) agreed favorably the instructor used Moodle effectively in their course offering, but a lesser percentage of students (69%) agreed that the organization and sequence of the course was easy to understand.

In questions 6 and 9, students were asked to demonstrate their satisfaction with the help information and training opportunities in Moodle. A majority of students (79%) surveyed agreed the help information in Moodle was useful, but only a small percentage of students (25%) strongly agreeing with the usefulness of the help documentation. Only about half of the students (58%) agreed they needed training resources to be successful with Moodle.

In questions 7, 8, and 13, students were asked to determine their experience with other LMS products and their preference and willingness to utilize Moodle. The majority of students (93%) have used web-based course software (e.g., WebCT, Blackboard, etc.) before attending this class. Of those students having used another web-based course system, the students (54%) slightly favored the use of Moodle over other systems. Students (69%) would use Moodle in another course, with only 24 of 134 students strongly disagreeing.

Question 15 offered students an open-ended answer box to express their over all impression of Moodle. Some students had concerns related to the complexity of the Moodle environment based on the faculty member's design of the course or specific interface issues. Students made clear the idea of only using one LMS; it was difficult to have classes in both WebCT and Moodle at the same time. A consistent theme by the student responses focused on the difficult paradigm shift from WebCT to Moodle. A slight majority of student responses agreed that Moodle was easier to navigate than WebCT and provided little trouble for those using an LMS for the first time. One student stated "This is my first class in Moodle and I have really enjoyed it". Student participants consistently expressed they found Moodle a bit confusing and overwhelming at first, but went on to describe Moodle as a useful instructional tool after becoming comfortable with the environment. Most having difficulty with Moodle were students previously using Moodle and with little or no orientation with the software. The overall data analysis of question fifteen can be found in Appendix IIC.

Question 16 provided information about the students' involvement in the previous fall pilot. A majority of the students (80%) were not involved in the study in the fall semester.

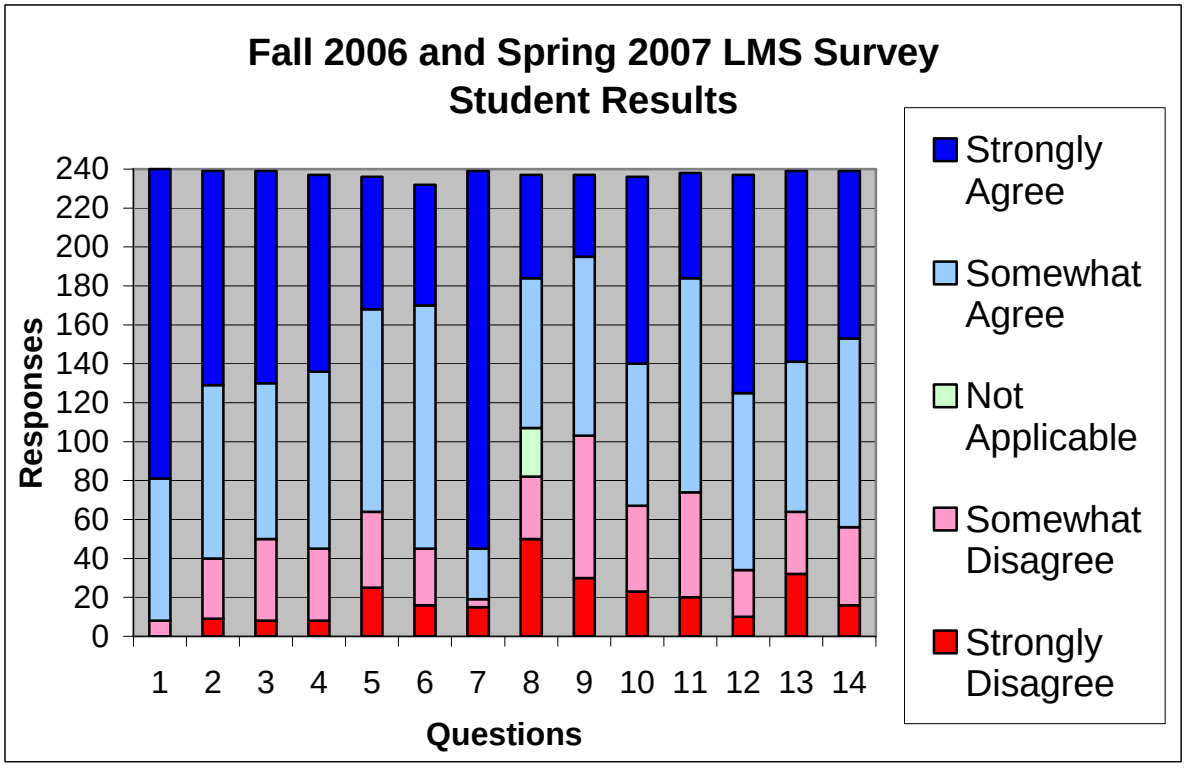


Chart 4: Fall and Spring Student LMS Survey Results

Chart 4 depicts the combined data from the fall and spring pilots to show the overall satisfaction of 240 students. University students have demonstrated in both Moodle Pilots an over-whelming agreement of Moodle. Moodle offers the majority of the students a product to effectively interface online with course materials and other students. Most students are excited by the potential of Moodle, but would like a single LMS solution for all their classes.

Faculty Satisfaction:

In the faculty LMS survey instrument, questions focused on issues around usability and interface of Moodle. The ITRC encouraged participation of the faculty population, because the users of the product needed to have a significant voice in this evaluation process in order to make it a meaningful and reflective representation of our campus community. Faculty members were selected based on their interest in Moodle. The students participated in Moodle courses offering various levels of online enrollment.

Twenty-three of 50 faculty members who were in the spring Moodle pilot participated in the LMS survey. Each faculty participant had an opportunity to express their satisfaction with Moodle in sixteen questions. The survey questions were designed to be similar in nature to those asked of the students to determine their satisfaction within the Moodle learning environment:

1. I am comfortable using computer technology.
2. I can easily navigate from one task to another within Moodle.
3. I did not have any difficulty creating class assignments in Moodle.
4. I find the assessment tools in Moodle easy to use.
5. I find the communication tools in Moodle easy to use.
6. I found the Help information useful in Moodle.
7. I have used web-based course software (e.g., WebCT, Blackboard, etc.) before attending this class.
8. I prefer using Moodle over other LMS applications (e.g., WebCT, Blackboard, etc.).
9. I think a training session on Moodle would have increased my success in this class.
10. I was able to post and import grades without difficulty in Moodle.
11. Moodle was straightforward and intuitive.
12. Moodle was used effectively by my students.
13. Overall, I would use Moodle in another course.
14. The organization and sequence of the course was easy to create in Moodle.
15. Did you participate in ISU's Moodle pilot in fall of 2006?
16. What is your over all impression of Moodle?

Fourteen of the sixteen questions were rated using a four-level Likert scale (Strongly Agree, Somewhat agree, Somewhat disagree, and Strongly Disagree). A ranking of each of the fourteen items are presented in Chart 4. The overall data analysis from each spring course is available in the Appendix IIIC.

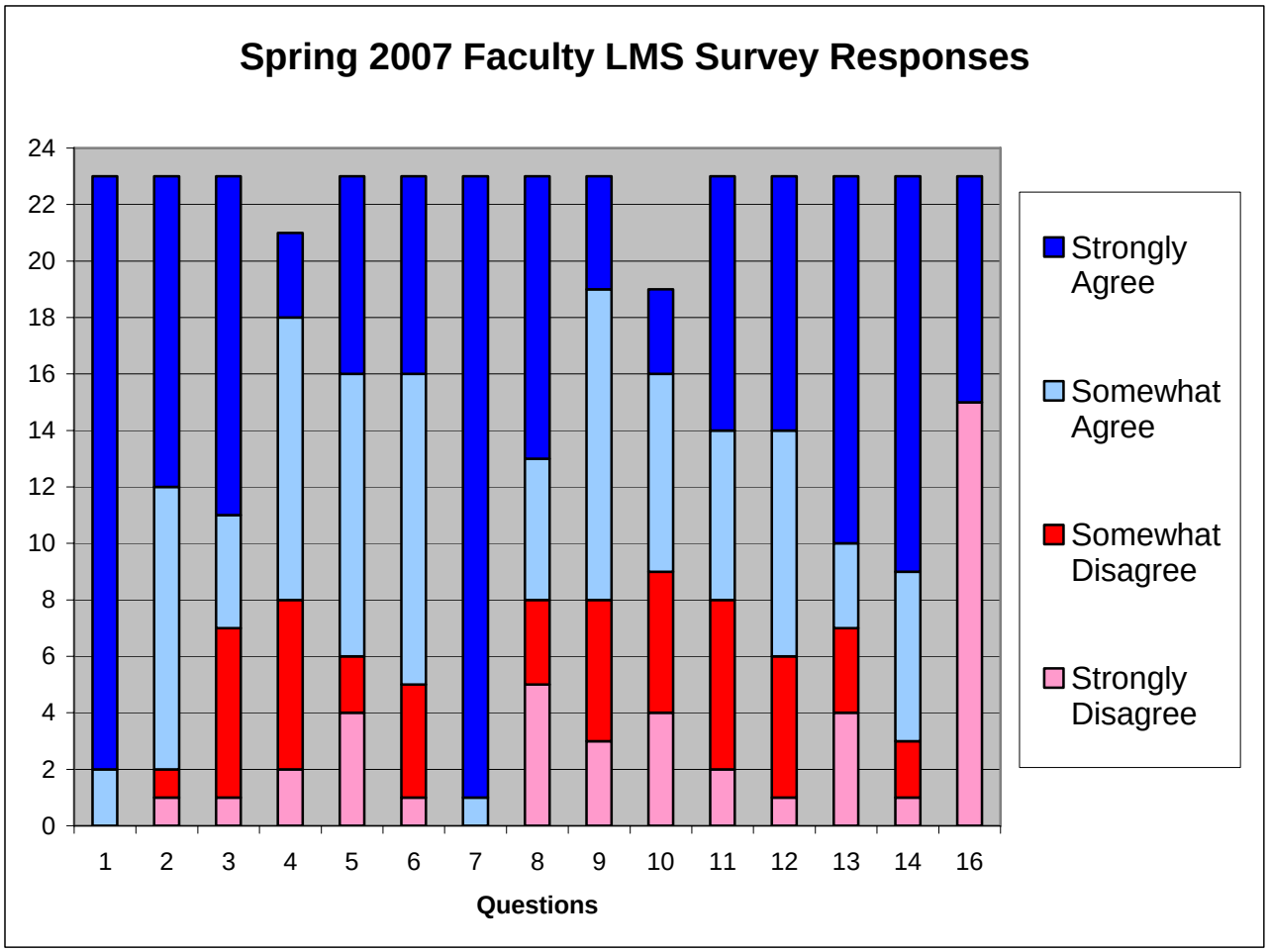


Chart 5: Faculty LMS Survey Results

The first survey question provided information about the comfort of the faculty utilizing computer technology. Faculty (100%) indicated a higher level of confidence in their technology skills then the students. Over 90 percent of the faculty strongly agreed while the other somewhat agreed with their comfortable with computer technology.

In questions 2, 4, 5, 10, and 11, faculty were asked to demonstrate their satisfaction of usability, ease-of-use, and intuitiveness in Moodle. The majority of faculty (91%) surveyed agreed navigating Moodle seemed easy with only one faculty member strongly disagreeing. Faculty agreed on the ease-of-use of the assessment tools (65%), communication tools (74%), and grade tools (61%) in Moodle. The overall intuitiveness of the Moodle environment was favorable by 65 percent of faculty participants. Considering a quarter of the faculty population was not satisfied with some of the tools and learning environment, data will be collected in the overall impression responses to determine specific problems that may have influenced their unsatisfactory experience with the Moodle environment.

In questions 3, 12, and 14, faculty members were asked to demonstrate their satisfaction with the pedagogical arrangement and criteria of the instructor's Moodle course. Most faculty (70%) surveyed agreed they had no problem creating class assignments. Faculty (74%) agreed favorably concerning student's effective use of Moodle in their course offering and even a greater percentage of faculty members (87%) agreed that the organization and sequence of the course was easy to understand.

In questions 6 and 9, faculty were asked to demonstrate their satisfaction with the help information and training opportunities in Moodle. A majority of faculty members (74%) surveyed agreed the help information in Moodle was useful, but only a small percentage of faculty members (4%) strongly disagreed with the usefulness of the help documentation. Faculty (65%) agreed they needed training resources to be successful with Moodle.

In questions 7, 8, and 13, faculty members were asked to determine their experience with other LMS products and their preference and willingness to utilize Moodle. The majority of faculty (100%) members have used web-based course software (e.g., WebCT, Blackboard, etc.) before teaching with Moodle. Of those faculty members having used another web-based course system, the faculty (65%) slightly favored the use of Moodle over other systems. Faculty (70%) would use Moodle in another course, with four faculty members strongly disagreeing.

Question 15 provided information about the instructors' involvement in the previous fall pilot. A slight majority of the faculty (65%) were not involved in the study in the fall semester.

Question 16 offered faculty an open-ended answer box to express their over all impression of Moodle. A majority of faculty responses provided favorable comments (e.g., "I really, really, really like this software so much better than WebCT", "Significant improvement over WebCT", and "Moodle is definitely the option…"). A few faculty participants also expressed constructive criticism (e.g., "forums, grades, assignment tools are especially badly formatted in Moodle", and "Moodle is much less intuitive than WebCT") of Moodle with concerns related to forums, grading, assignments and email, but went on to describe Moodle as a useful in other areas. The overall data analysis of question sixteen can be found in Appendix IVC.

Chart 5 depicts the combined data from the fall and spring pilots to show the overall satisfaction of 36 faculty members. University faculty members have demonstrated in both Moodle Pilots an over-whelming agreement of Moodle. Moodle offers the majority of the faculty a product to effectively facilitate online course work. Most faculty members are excited by the potential of Moodle, but have some concerns with migration efforts from WebCT to Moodle.

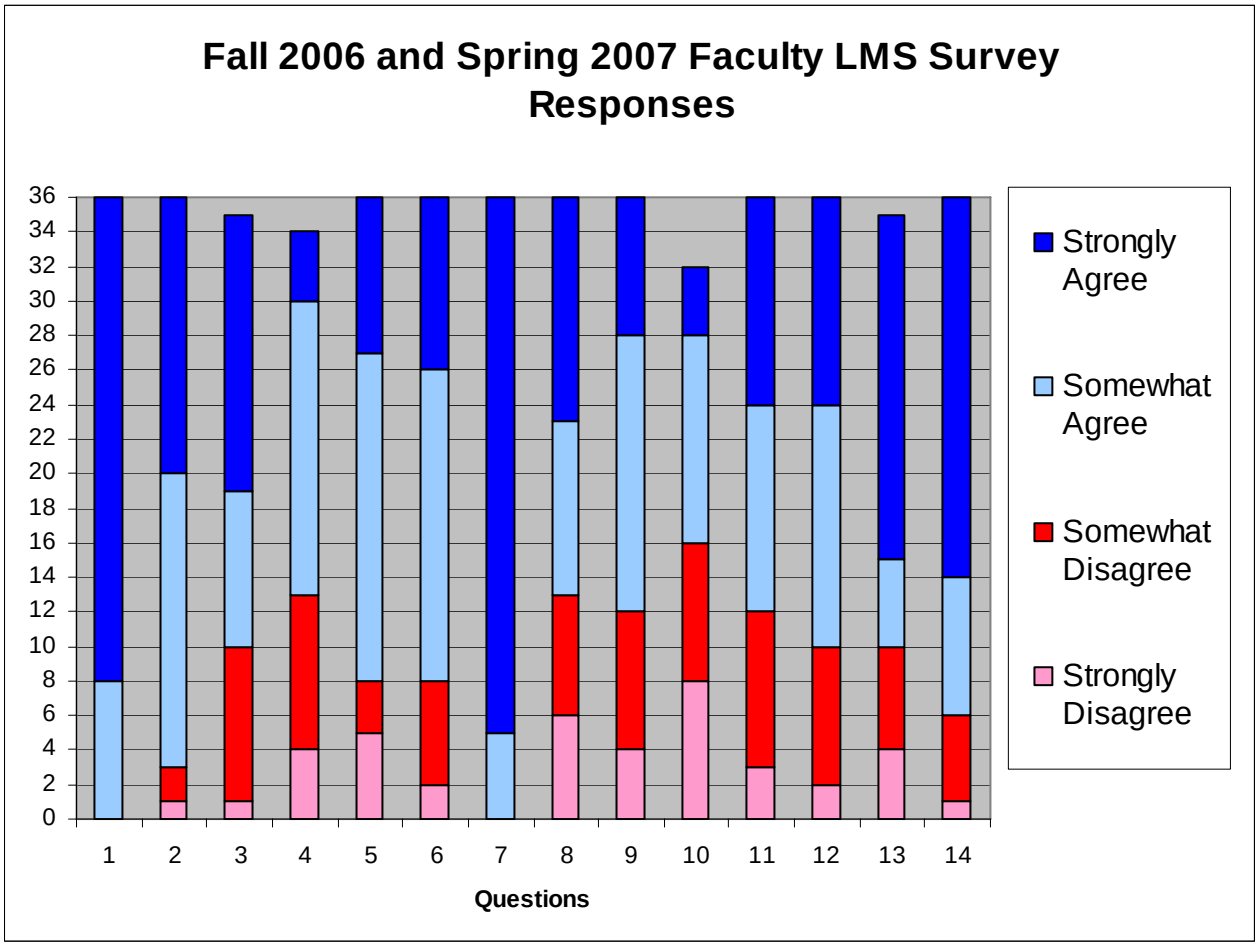


Chart 6: Fall and Spring Faculty LMS Survey Results

Correlation of Student and Faculty Responses:

In student and faculty responses of the LMS survey instrument in the spring, questions constantly focused on issues around usability and interface of Moodle. The question for both groups were designed to be similar to determine relationships in the data collected. Consistency in question format can be identified in questions 1, 2, 4, 5, 6, 7, 8, 9, 11, and 13. For the most part, faculty (75%) and students (75%) favored Moodle when responding to these questions. The other questions (i.e., 3, 10, and 12) were designed to allow users (i.e., faculty or students) to reflect on their specific contextual interpretation of the Moodle based on their user role.

In question 3, faculty members were asked about creating class assignments and students were asked about completing class assignments. Students (75%) agreed they were comfortable about completing assignments and faculty (70%) agreed they were comfortable creating class assignments. There was a positive correlation between faculty reporting that they were not comfortable with creating class assignments (30%) and students (25%) not being comfortable completing assignments.

In question 10, students were asked about the challenges of the accessing grades and faculty members were asked about posting and importing grades. Students (67%) agreed they were comfortable with this process, while more than half of the faculty (61%) agreed in

their comfort with posting and importing grades. Students (33%) who reported not being comfortable with accessing grades were directly connected to the courses and the faculty (39%) with problems with the Moodle grading system had a direct impact on those students.

In question 12, faculty members were asked if Moodle was used effectively by their students and students were asked if Moodle was used effectively by their instructor. Students (80%) agreed that Moodle was used effectively by their instructor and faculty (74%) agreed that Moodle was used effectively by their students. Faculty (26%) who reported students didn't use Moodle effectively also included the students (20%) reported the instructor not using Moodle effectively. This can be identified in several courses where instructors reported students not using Moodle effectively.

Campus Technology Support:

Information Technologies Services (ITS) provided technology infrastructure support (e.g., telecommunications, hardware, operating system, and security) for the LMS Pilots. The Moodle application support and data base management was administrated by the new LMS administrator and ITRC staff. The areas of technology support focused on student information, server operating systems (OS), database software requirements, hardware specification, Moodle software versions, and potential integration with an enterprise system.

As part of the evaluation process of Moodle, student information data was connected and tested using the University's LDAP system. The LDAP and API capabilities of Moodle have provided an easy transition for populating student data in courses. Similar data sent to the current WebCT server was identified as a short-tem solution. The ITRC will continue to work on tuning the student information system integration as the Universities system changes with our recently selected enterprise system (i.e., Banner).

The OS used during the fall pilot followed the standard open-source model by using Red Hat Linux Enterprise and Apache. The second pilot followed the OS supported by the campus ITS group using Sun Solaris 10 and Apache. The Solaris system used during the spring pilot offered some supporting evidence for our study. Our success with Solaris will be shared with the Moodle community for other members interested in running Moodle on Sun Solaris system.

Moodle offers additional flexibility with other databases and data tables from other applications (e.g., MySQL). Moodle has the most flexibility, to include a variety of options with OS and hardware, whereas WebCT requires more specific equipment configurations. Moodle will also have the flexibility to be integrated with Oracle and MS-SQL if the University chooses to align Moodle with other enterprise applications.

ISU used Moodle version 1.6 during both pilot studies to keep consistency in application and determine benefits of newer versions. Contributed Moodle community modules were added, in some cases modified by ISU, to Moodle in the pilot and are included in Table 1:

Contributed Moodle Modules	
Book Object	File Manager
Course Program	QuickMail
Course Menu	WebDAV
Gradebook Plus	Questionnaire
ISU Modified Modules	
WebCT Question Upload	QuickMail
Quiz Reporting	Course Program
Course Menu	

Table 1: Moodle Modules Results

The contributed modules provided solutions from feedback gathered during the study to resolve limitations identified by the faculty and students during the pilot. Some of the additional tools integrated into Moodle during the study have also been adopted by newer versions of Moodle 1.7 and 1.8.

In the fall pilot, the hardware included a single Dell server with two Intel(R) Xeon(TM) 3.40GHz CPUs, 1GB of RAM, and 72GB of hard disk space. Since this was not a true reflection of the hardware technology supported by ITS, four Sun servers were purchased from the state of Idaho at a discount rate as part of a bulk purchase by ITS. The four SunFireV440 servers were identified as eLearning1, eLearning2, eLearning3, and eLearning4 for the pilot. Moodle application was installed on eLearning1 and eLearning2 was used to run the database (i.e., MySQL) to provide pilot courses with an environment to expand this evaluation process. The other two Sun servers were operated as test servers for software upgrades and experimenting with new modules or software modification.

During the Focus Group Process, the University was working on an ERP to begin the selection of an Enterprise System to help distribute and report institutional data through a common system. Banner was selected in February by the University to facilitate data management. Once Banner is fully developed, time and resources will be needed to develop an interface that will allow manual or automatic student data population, course creation, and archiving. Moodle has been successfully implemented in conjunction with Banner at Oakland University and University of Louisiana Lafayette. Both schools have provided information to the Moodle community to provide seamless integration with their campus student information system using Banner.

Final Recommendation

Based on the positive data collected from the focus groups and pilots, the ITRC recommends starting our migration from WebCT 4.0 to Moodle 1.6. The success of the Moodle pilot was measured based on the following criteria:

- pedagogical value and usability
- financial concerns
- support issues
- assessment criteria for accreditation
- integration with technology services
- dependable long-term solution

The same LMS pilot survey instruments were used in the fall 2006 and spring 2007 to evaluate levels of student and faculty satisfaction with focus on pedagogy and usability. The overall rating favors the use of Moodle, but with some hesitation from faculty and students currently using WebCT. The most difficult challenges with regard to pedagogy will be faculty becoming familiar with the new technology and identifying new teaching methodology and best practices. Usability is another area in which most students and faculty members found Moodle easily navigable, but some imperfections must be addressed as the product evolves. Moodle was not perfect for everyone, but for the majority University participating found Moodle expectable with options to expand.

Financially Moodle makes the most sense, but doesn't come without some financial commitment. The good news is their will be no annual licensing fees and additional fees to expand instructional modules. Cost will still be attached to user support, technology infrastructure, development, and community participation. Funding saved can be redistributed to the learner and in expanded instructional support efforts for faculty. The University can not afford to be in a situation of spending money on the research and design of a private organization when funding should be redistributed into the research initiatives of our University.

Support issues include faculty design, student usability, and technology infrastructure. As part of the evaluation of Moodle faculty were offered course design support, but many faculty needed little help modifying or designing courses. Students' largest hurdle, as with most applications, was authenticating to Moodle. Most students had very few issues and most were resolved by the faculty member. The ITRC received very few phone calls for Moodle support during the pilots. The new LMS administrator has managed the application and database with little effort and is projected to expand as Moodle efforts with little load on ITS.

With assessment driving our nation's education system, Moodle provides a layering reporting and assessment gathering methodology to expand and support most departments and colleges. The flexibility in design of Moodle allows our development team to modify and create assessment modules for specific department and program needs. With flexibility in assessment data gathering and reporting, Moodle has demonstrated its value with the ISU Assessment Coordinator by offering flexibility in design of the assessment tools and reporting functions of Moodle.

With the selection of Banner as the University's enterprise system, ISU contacted other institutions (i.e., Oakland University and University of Louisiana Lafayette) about supporting and integrating Moodle into the Banner with focus on populating courses with student data and automatic course creation. This process provided positive results and reinsurance about the compatibility of Banner and Moodle.

Scheduling will be key to making the migration from WebCT to Moodle a success. The ITRC will immediately begin to offer training and provide support for faculty interested in getting started with Moodle. WebCT courses will be migrated into Moodle starting in the summer semester of 2007 and will continue until the expiration of the WebCT license in July, 2008. Faculty may continue to use WebCT, but will not be able to request new courses in WebCT. WebCT training will no longer be offered, but migration support will continue until every course has been successfully migrated into Moodle. Starting in the fall of 2008, faculty and students will experience Moodle in all their courses offerings with web-based teaching and learning environments.

With an expectation of delivering a high quality product, a task force of faculty, staff, and students will be identified to help make recommendations about improving Moodle to the meet the needs of our campus community. This task force will meet each month and will determine priority of changes that need addressed in Moodle. The tools or resources in Moodle needing the most attention will be determined and institutional resources will be identified to make requested changes.

Moodle, like any LMS, is not the perfect solution for our institution, but provides many more options and opportunities to drive sustainability and advancing teaching and learning opportunities. Moodle's open-source technology encourages more collaboration efforts with other institutions with engaging efforts of defining and refining web-based instruction that support teaching and research. The successes and lack of success of Moodle will be defined by our own dedication to course redesign and new pedagogical realignment with web-based course initiatives. As demonstrated in this report, Moodle can logically be identified as a long-term solution for ISU.

Appendix IC

Student Survey Result by Courses (Questions 1-14)

		I_AM_COMF	I_CAN_EA	I_DID_NOT	I_FIND_AS	I_FIND_CC	I_FOUND_	I_HAVE_U	I_PREFER	I_THINK_T	I_WAS_AB	MOODLE_	MOODLE_	OVERALL_	ORGANIZA
RESPONSE	COURSENAME	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
1	SOWK 476/477	b	a	b	a	b	b	b	b	d	b	b	a	a	b
2	R S 441 - 01	b	a	b	a	a	a	a	b	d	a	a	a	a	a
3	R S 441 - 01	b	a	a	a	a	b	a	a	b	b	a	a	a	a
4	R S 311 - 01	a	b	b	c	b	b	a	d	c	c	c	b	d	b
5	R S 311 - 01	b	d	c	c	f	f	a	b	a	b	c	a	b	a
6	PTOT 626 - 01	b	a	b	b	b	b	b	e	b	b	b	b	b	b
7	PTOT 626 - 01	b	a	a	c	b	c	a	b	c	c	b	a	b	b
8	NURS 657 - 01	c	d	c	c	c	d	a	d	a	d	c	c	d	c
9	NURS 657 - 01	a	b	c	b	a	b	a	c	c	c	c	b	c	c
10	NURS 645 - 01/6	a	b	b	b	c	b	a	c	b	b	c	a	b	b
11	NURS 645 - 01/6	b	b	b	c	c	d	a	c	b	a	c	b	c	c
12	NURS 635 - 01	a	a	b	b	a	b	a	a	a	c	b	b	a	a
13	NURS 609/610	b	c	b	d	d	b	a	d	a	d	d	d	d	d
14	NURS 609/610	a	b	c	c	c	b	a	d	b	c	d	c	c	c
15	NURS 609/610	a	c	c	d	f	d	a	d	a	f	d	d	d	b
16	NURS 609/610	a	a	b	c	d	d	a	d	a	c	d	d	c	c
17	NURS 609/610	a	b	c	c	b	a	a	d	b	c	c	c	c	c
18	NURS 609/610	b	c	c	d	c	c	a	d	d	b	d	c	d	b
19	NURS 609/610	b	b	c	c	b	c	b	c	a	b	c	b	b	c
20	NURS 609/610	a	a	a	a	a	a	a	a	c	b	b	f	a	a
21	NURS 609/610	b	c	c	b	d	b	a	f	c	b	c	c	c	c
22	NURS 609/610	a	d	d	d	d	b	a	d	b	d	d	d	d	d
23	NURS 609/610	a	a	a	b	c	b	a	c	b	c	c	c	b	c
24	NURS 609/610	b	c	c	d	c	a	b	d	a	d	c	c	c	c
25	NURS 609/610	a	c	c	c	d	d	a	d	b	d	d	c	d	d
26	NURS 604 - 01	b	b	c	c	c	b	a	c	b	d	c	b	b	c
27	NURS 604 - 01	a	c	d	c	d	d	a	d	a	d	d	b	d	d
28	NURS 604 - 01	a	b	b	b	b	b	a	d	b	c	c	c	c	b
29	MBA 623	a	a	a	a	a	a	a	a	a	b	a	b	a	a
30	MBA 623	b	b	a	a	b	b	a	c	c	b	b	b	c	b
31	HCA 210 - 01	a	a	a	b	b	b	a	c	c	b	b	b	b	a
32	HCA 210 - 01	a	c	d	b	d	d	a	d	b	a	c	d	d	c
33	HCA 210 - 01	a	a	a	a	b	b	a	e	b	a	b	b	b	a
34	HCA 210 - 01	a	b	b	c	b	c	a	c	b	a	b	c	b	a
35	HCA 210 - 01	a	c	b	b	b	b	a	d	c	a	c	c	c	b
36	HCA 210 - 01	a	b	b	a	a	b	a	e	d	a	a	a	a	a
37	HCA 210 - 01	a	a	b	c	b	b	a	c	b	c	c	c	d	d
38	HCA 210 - 01	a	b	d	a	c	b	a	d	b	a	b	a	b	a
39	GEOL 409/509	a	a	a	a	a	b	a	a	d	a	a	a	a	a
40	GEOL 409/509	a	b	a	b	b	b	d	d	b	c	b	b	b	b
41	ENGL 308 - 01	b	a	a	a	a	b	a	b	d	a	a	a	a	a
42	ENGL 308 - 01	a	a	a	a	a	a	a	a	b	b	a	a	a	a
43	ENGL 308 - 01	a	a	a	a	a	b	a	a	c	c	b	a	a	b
44	ENGL 115 - 01	a	b	a	b	c	c	a	f	f	f	f	f	f	a
45	ENGL 115 - 01	a	b	b	b	b	b	a	c	c	d	c	b	c	c
46	ENGL 115 - 01	a	b	b	b	b	a	a	c	c	c	b	a	b	b
47	ENGL 115 - 01	a	b	c	b	b	b	a	b	a	d	b	a	b	b
48	ENGL 115 - 01	b	b	c	c	d	c	a	d	b	c	c	b	d	c

49	ENGL 101 - A2	b	c	c	c	b	b	a	c	a	c	c	b	d	c
50	ENGL 101 - A2	a	b	c	c	c	c	c	c	b	a	c	b	d	c
51	ENGL 101 - A2	a	a	a	b	b	b	b	a	b	a	b	b	a	b
52	ENGL 101 - A2	a	b	c	c	b	c	a	c	b	c	c	b	c	b
53	ENGL 101 - A2	a	b	b	b	a	a	d	a	b	b	a	b	b	a
54	DENT 635 - 01	a	b	a	a	a	a	a	a	b	a	a	a	a	a
55	DENT 631 - 01	b	a	a	a	a	b	a	a	b	b	a	a	a	a
56	DENT 625 - 01	a	b	b	b	d	b	a	d	c	c	c	b	d	b
57	DENT 625 - 01	a	a	a	a	a	b	a	a	c	a	b	a	a	a
58	DENT 625 - 01	a	a	a	f	b	b	a	c	b	b	b	a	b	b
59	DENT 621 - 01	a	b	c	b	d	b	a	d	b	c	c	b	d	b
60	DENT 621 - 01	a	a	a	a	b	b	a	a	c	a	a	a	a	a
61	DENT 615 - 01	b	d	c	c	d	b	a	d	a	b	c	b	d	d
62	DENT 615 - 01	a	b	a	a	b	b	a	b	a	b	b	a	b	a
63	DENT 201 - 02	a	a	b	b	b	a	b	b	b	c	b	b	b	b
64	DENT 201 - 02	a	b	b	b	a	b	a	d	b	b	b	a	c	b
65	DENT 201 - 02	a	a	a	b	b	b	a	a	c	a	a	a	a	a
66	DENT 201 - 02	a	a	a	a	b	b	a	b	c	a	a	a	a	a
67	DENT 201 - 02	b	a	a	b	b	b	a	e	b	b	b	b	b	b
68	DENT 201 - 02	b	b	b	a	c	b	d	c	b	d	b	b	b	b
69	CIS 403 - 01/503	a	a	a	a	a	a	a	a	b	a	a	b	a	f
70	CIS 302 - 04	a	c	c	c	c	d	a	d	a	d	d	d	d	d
71	CIS 302 - 03	a	c	c	b	c	c	a	c	c	c	c	d	d	d
72	CIS 302 - 03	a	b	a	b	b	b	a	a	a	a	b	a	a	b
73	CIS 302 - 03	a	b	b	a	b	b	a	b	b	c	b	b	a	b
74	CIS 302 - 03	a	a	a	a	b	a	a	a	d	b	b	b	a	a
75	CIS 302 - 01	c	c	b	c	c	d	b	c	b	c	c	c	b	c
76	CIS 301 - 02	a	b	a	a	a	f	a	a	c	c	b	a	a	a
77	CIS 301 - 02	b	c	c	c	c	c	a	b	a	d	c	c	b	c
78	CIS 301 - 02	a	b	a	a	b	b	a	b	c	c	b	a	b	b
79	CIS 301 - 02	a	c	b	b	d	a	a	d	b	d	c	b	c	c
80	CIS 301 - 02	a	a	b	a	a	b	a	a	c	a	a	a	a	b
81	CIS 301 - 02	b	c	c	c	d	d	a	d	a	c	d	a	b	b
82	CIS 301 - 01	a	a	b	a	a	b	a	b	a	a	b	b	b	b
83	CIS 301 - 01	b	b	b	a	b	b	a	c	c	a	b	b	b	b
84	CIS 301 - 01	b	b	a	b	b	b	a	b	a	b	b	a	b	b
85	BIOL 670 - 01	b	d	d	d	d	d	a	d	a	d	d	c	d	d
86	BIOL 670 - 01	b	a	a	a	b	a	b	b	b	a	a	b	a	a
87	BIOL 307 - 01	b	a	a	a	b	a	a	b	b	a	a	a	a	a
88	BIOL 307 - 01	b	a	b	b	b	b	a	a	b	a	a	a	a	a
89	BIOL 307 - 01	a	a	a	a	a	b	a	a	c	a	a	b	b	a
90	BIOL 305 - 01	b	b	a	b	b	b	a	b	b	a	b	a	b	b
91	BIOL 305 - 01	a	d	d	d	d	d	a	d	d	c	d	c	d	d
92	BIOL 305 - 01	b	a	a	b	b	b	a	a	b	a	a	a	a	b
93	BIOL 305 - 01	a	a	a	b	a	b	a	b	b	a	b	a	a	a
94	BIOL 305 - 01	a	a	a	a	b	a	a	c	b	a	b	a	a	c
95	BIOL 305 - 01	a	b	d	c	b	c	a	d	b	a	c	b	c	c
96	BIOL 305 - 01	b	b	b	b	b	b	a	b	c	b	b	a	b	b
97	BIOL 305 - 01	a	a	a	a	a	a	a	a	a	a	a	a	a	a
98	BIOL 305 - 01	a	a	a	a	b	b	a	a	d	a	a	a	a	a

99	BIOL 305 - 01	a	a	a	a	a	b	d	c	c	b	b	b	c	b
100	BIOL 305 - 01	a	a	a	a	a	a	a	b	d	b	a	b	b	b
101	BIOL 305 - 01	a	b	a	a	b	b	a	b	c	b	c	b	b	c
102	BIOL 305 - 01	b	b	a	b	b	a	b	e	b	d	b	a	a	a
103	BIOL 305 - 01	a	a	a	a	b	b	a	a	c	a	a	a	a	b
104	BIOL 305 - 01	a	a	c	a	a	b	a	b	d	b	b	a	a	b
105	BIOL 305 - 01	c	c	c	b	c	a	a	d	c	b	d	a	d	c
106	BIOL 305 - 01	a	b	c	b	c	c	a	d	c	b	d	b	d	c
107	BIOL 305 - 01	b	b	b	b	b	b	a	b	c	b	b	b	b	b
108	BIOL 305 - 01	b	b	b	b	b	b	a	a	b	a	b	a	a	a
109	BIOL 305 - 01	a	a	a	a	a	a	a	a	d	a	a	a	a	a
110	BIOL 305 - 01	a	b	b	b	b	b	a	c	b	b	c	b	c	b
111	BIOL 305 - 01	a	a	a	a	d	b	a	d	d	a	b	b	b	b
112	BIOL 305 - 01	a	a	b	a	a	a	d	e	d	a	a	a	a	a
113	BIOL 305 - 01	b	b	a	a	c	b	d	e	c	b	b	b	a	c
114	BIOL 305 - 01	a	a	a	a	a	a	a	b	a	b	a	a	a	b
115	BIOL 305 - 01	a	a	a	c	c	c	a	d	d	b	d	d	d	d
116	BIOL 305 - 01	b	a	b	b	b	f	d	e	b	b	b	b	b	b
117	BIOL 305 - 01	a	a	a	a	a	b	a	b	d	a	a	a	a	a
118	BIOL 305 - 01	a	a	a	a	a	a	a	b	a	a	a	a	a	a
119	BIOL 301 - 01	a	a	a	a	a	a	a	b	b	a	a	b	a	b
120	BIOL 301 - 01	a	a	a	a	a	a	a	a	a	a	a	a	a	a
121	BIOL 301 - 01	a	a	a	a	b	b	a	b	c	b	b	b	a	b
122	BIOL 301 - 01	a	a	a	a	a	a	a	b	c	a	b	a	a	a
123	BIOL 301 - 01	a	a	a	a	a	a	a	a	c	a	a	a	a	a
124	BIOL 301 - 01	a	a	a	a	a	a	a	b	c	a	a	a	a	a
125	BIOL 301 - 01	a	a	a	b	b	a	a	b	d	c	b	a	a	a
126	BIOL 301 - 01	a	a	a	a	a	a	a	a	b	a	b	a	a	a
127	BIOL 301 - 01	a	a	b	b	c	a	a	a	c	a	b	a	a	c
128	BIOL 301 - 01	a	b	b	b	b	b	a	c	b	a	b	b	b	c
129	BIOL 301 - 01	b	b	b	b	c	b	a	d	b	c	c	b	d	c
130	BIOL 301 - 01	a	c	c	c	b	b	c	e	c	b	c	c	c	b
131	BIOL 301 - 01	b	c	b	b	c	b	a	d	d	a	c	b	a	c
132	BIOL 301 - 01	a	b	b	b	b	b	a	b	c	b	b	a	b	b
133	BIOL 301 - 01	a	a	b	a	a	b	a	a	b	a	a	a	a	a
134	BA 200 - 01	b	b	b	b	b	a	a	b	a	a	b	c	b	a

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
	f	0	0	0	1	2	3	0	2	1	2	1	2	1	1
Not Applicable	e								9						
Strongly Disagree	d	0	6	7	7	16	12	7	34	18	15	15	8	24	11
Somewhat Disagree	c	3	19	27	26	23	13	2	24	37	28	34	18	18	29
Somewhat Agree	b	40	48	41	46	55	73	9	33	52	38	50	49	38	47
Strongly Agree	a	91	61	59	54	38	33	116	32	26	51	34	57	53	46
	Total	134	134	134	134	134	134	134	134	134	134	134	134	134	134

Appendix IIC

Student Survey Result by Courses (Question 15)

Student Survey Overall Impressions

Spring 07 Responses:

Why is moodle not linked on the "Current Student" page for ISU? Unless you have it marked you have to search for it. Also, why is it not well known or used in more classes? When I mention it to students, many of them have never heard of it before. I like Moodle!

Although it took some time to learn how to use it, I find it much more effective than webct. It is easier to know what is expected of me, what my assignments are, when they are due, and where to submit them. I also love being able to communicate with my peers and professor with the messaging system.

I personally don't like Moodle. I found it hard to navigate in moodle. There are too many links, and tools that can be used. Grading system is not effective. Instructor didn't keep grades up to date. Calendars were not up to date. It has no prompting on test results like webct. Overall I would prefer to use Webct over Moodle.

Moodle helped me to be an organized student!

After using Web CT and moodle I prefer Web CT. Moodle has too many different and in my opinion unnecessary sections that you can go into. There is nothing wrong with simplicity if it works.

I liked it, it would have been helpful to have a quick training video or informational message board before the first day of classes. But overall I like it better than WebCT.

I liked Moodle once I got used to it. The first few weeks it looks overwhelming with all the options to pick, but the training helps and it is easy to learn once you get in and do it.

I really like Moodle a lot. I think there is a lot more options available to be utilized in Moodle than Web CT.

I was nervous with this program at first, surely because it was new. But, I would recommend Moodle to anyone. It's very easy to use and is organized nicely.

It is an okay program. I think that WebCT was easier to use and less confusing. On Moodle the grades section is difficult to understand, I liked WebCT for the fact that WebCT showed you all your assignments that were due for the semester and how many points you could accumulate from those assignments, then after completion of those assignments you were able to look at each individual assignment to view your points. This was also helpful in keeping organized as to what assignments and tests were due on certain dates. Another complaint about Moodle is that when you are taking a test and finish, it does not tell you what questions were answered and which ones were left without answering. I liked WebCT for the fact that it told you which questions you may have overlooked and not answered, so before you submit the test/quiz, you can go back and answer any remaining question that you may have overlooked. Valuable points can, and have been lost due to this problem.

Moodle wasn't that hard to figure out. I didn't have any problems with it at all. Everything worked out great I would definitely use it in another class if I had too.

This is my first class that I have taken in moodle and I have really enjoyed it. I have taken many classes in web-ct and I have found that so far I like moodle better at this point. I have not had many problems with it.

works well except for quizzes are unable to be printed after taken so they can be reviewed

I do not like using Moodle. The communication is one of the hardest parts of this program.

my anti-virus sees this program as a threat and I have to turn off my pop up blocker to do the quizzes. This is a huge problem with me. I do not want a virus. Please fix this issue.

some confusing would like more indication in forums that have read all or that there is new too much back and forth would like more info at single glance

There seemed to be too much information all on one screen. The best thing about moodle is that you can see on the calendar when your assignments are due....that was the greatest. It kept you on track and in control.

easy and self explanatory

I didn't mind the program at all. However, move the "timed" clock during a timed quiz/exam. It tends to cover up questions and is very distracting in the present location.

I don't like it. It is confusing and hard to navigate in, unlike good 'ol WebCT. I like WebCT a lot better and had a lot more success using it.

I found the home page to be unpleasant to use. A check-off or change in color to indicate that it was something I'd already read or attended to would have been nice. Instead, out of concern that I might miss something that had been added or changed, I found myself opening the same things repeatedly. There were several other small things that I think can be improved but this was the biggie. Overall, I REALLY unexpectedly liked taking a class on-line. I was very apprehensive at the outset because I really hate sitting in front of a computer. But because of the flexibility it offers, I can still work full-time and be an engaged member of my family while taking this course. Please offer LOTS more! Thanks.

I guess I must be used to the other web applications (Blackboard, WebCT). I don't think that Moodle is as effective nor as easy to navigate. It would probably just take some more getting used to.

I like moodle so much more than Web CT. It is easier to find everything and I just like the layout of Moodle to Web CT!

I would like to see the save tab available after each question on the tests, like we had in the WebCT program. If the power should go off I would loose all my work or answers entered on an exam. That area needs work. If its there I have not been able to find it. I would really like that implemented into moodle. Thanks.

I would've liked to be able to see all of my different assignments, exams, and quizzes individually listed in the gradebook so I could see the breakdown a little easier. I like how webct is organized better than moodle.

It's great!

It's kind of like WebCT with emoticons. Quizzes are better because you don't have to save answers. Organization is somewhat annoying because it is so repetitive-- I would like to have one list of icons or subjects to view on the front page rather than colums, lists, and windows all containing the same info. It is easy to use. I had some issues with messaging--I got messages from people I don't know who are not in my classes and I had a little difficulty figuring out the messaging tool-- but once I read the instructions it was easy!

Moodle has been very easy to navigate. I am impressed with the system and wouldn't have any suggestions for change.

Not a very good system. WebCt online courses run much better, and have less confusion.

The homepage was set up to encourage easy navigation. I could usually find what I needed off the homepage of this course. The teacher seemed like she was well acquainted with the program. The video feature was an extra bonus! That really helped in the presentation of the material.

This is my first class that is given completely by on-line. I was able to learn the system within a reasonable time. I am not a computer-oriented student; yet, I did not have to have any extra help other than one that was provided by the course to understand the system. I think Moodle can be learned by any students if he/she had a little experence with computer (e.g. word processing, Email corresponding, etc.)

This program is extremely cumbersome and lacks any remote sense of being user friendly. I have used both Blackboard and WebCT and find Blackboard to be the easiest platform to utilize. I understand that there are costs involved with pplatforms other than moodle but this is a case of "you get what you pay for." The use of this program will not serve ISU well if there is a desire to increase the use of online education. Moodle needs to go away.
Works fine, well organized

Web ct is a much friendler system than moodle. I am not impressed with moodle from a student perspective. It has detracted from my class learning.

It seems to be OK. Anytime something new comes along, it takes some time to learn it and get familiar with it. It took me a while to get comfortable with WebCT.

Moodle isn't too bad, but I think that students and instructors need to have more training on how to use it. When I first got the email about the e-learning site, I was not even aware that it was related to ISU. When the address changed, I was not e-mailed about the change in address. I had to send an email and ask what the new address for the site was so that I could submit my class assignment. When looking at grades from assignments, I don't like the way instructor feedback is given. It was difficult to find and not as helpful as when I have received feedback in other ways.

At first it was ambiguous, but after multiple trial and errors of using it incorrectly, it became easier. However, I find that there are a lot of unnecessary sequences involved with trying to find out grades. In particular, no mid term grade or letter grades are available. In essence, students want to know what their letter grade is up to this point: now. Personally, I liked the way the Accounting 201 and 202 professor's utilized Web CT for those courses. Particularly, the way I could see my current grades for each assignment and know what my current overall grade was for the class at a monthly basis (at least once a month per semester) and anticipate where I need to improve my study habits for that particular class. good
It is pretty good. It would be so much better if us as students were taught how to use moodle. Teachers expect all students to be computer geeks and know how to navigate through these learning sites. I always thought that webct was easy to use and I thought that it worked fine. It's not that moodle has been hard to use, but I just liked how webct worked better. It will take a little time, but I'm sure it will work out fine though. I'm not too concerned about it. It has been easy to work with and I have an overall good impression of it.

Currently in the class that I am using Moodle, we are only using it to access documents from the teacher, submit assignments and review grades on submitted assignments. We haven't used anything else and frankly I am glad. I don't really like Moodle, it is to open-ended and you cant find anything easily. Why does it display other users that are logged on if you can even communicate with them. When I try to use the chat or send email to another classmember it didn't pop up or notify them. WebCT is much more straight-forward and simple to use. The one thing I do like about Moodle is it can potentially (if they don't spend the money on other items) reduce student fees; then I really wouldn't care. It is easy to learn and use. I like the communication features but they are not very easy to learn to use. It is not a bad system. Being new I find that the instructors just expect that students are using this type of system all the time, but it has been my experience that very few instructors actually use this type of system. It would be nice to have a standard so we as students would be able to know we always come to this location for what we need and that all the resources are here. Curently I have 1 professor that actually uses the system.

It's hard to navigate and not very easy to use. I prefer WebCT.

Great tool if instructors can at least learn to use all the common features. Better than WebCT!

I like using moodle, It helps keep me organized because everything is there. It is a good place to take an online class
It worked for me Really user friendly.

I'm glad our posting go to our e-mail addresses, otherwise checking every discussion area in Moodle would be too time consuming. In WebCT all new disussion is posted easy to locate. The other proble I have with Moodle that I never had with WebCt is attaching documents. Moodle doesn't allow for very much to be attached-very fraustrating I've had to resort to truning word doc into jpeg etc. too time consuming.

It was much more difficult to use than WebCT and Blackboard. I did not like how in the forum, you could not view which messages were new and which were not. I think a method for discussion board similar to WebCT is much for user friendly because you can see them threaded and unread messages are easily identified.

Having now been exposed to WebCT, Blackboard and Moodle... truthfully I wish we could combine some feautres of each. I do feel that Moodle is the most intuitive and allows the instructor to really use the most online learning tools.
This version is clearer to use than another version I have used.
It was much more difficult to use than WebCT and Blackboard. I did not like how in the forum, you could not view which messages were new and which were not. I think a method for discussion board similar to WebCT is much for user friendly because you can see them threaded and unread messages are easily identified.

I liked it, it was nice to be able to view the other students in class- it helps me to remember who made a certain comment

I have enjoyed using it. I really like seeing a photo of the students and professors and I love that messages can be sent to my email. that way I do not miss comments and updates.

Better than Wen CT. However I would like to see more use of POD Cast by my instructor! i do not like moodle. It was not to bad, but still needs some work done. You have to type all your papers in a word document and then copy and paste then to moodle. Every time you try and spell check in moodle it say error on page and deletes every you have typed.
It has alot of bugs that need to be worked out but otherwise it seems to be a useful tool for the class.

good, you need to have a certificate for explorer 7 and my other improvement suggestion is that you should make it easier to see if you have a message. it just takes to long to go in and find youself to see. if you could have it more readily seen on the home page it would be much easier like the webtc is done I am not a big fan of Moodle. I don't like it. It is harder and more confusing than webct. Overall if I have to use I could. I thought it was alright but in can be an inconvience at times Moodle is a good progam, it just has some glitches that really need to be worked out. I could never figure out how to check my grades exactly and I really didn't like that. The forums were hard to sometimes fgure out and use too. But I really believe that this site is easier to use than Web- CT in many ways.

Much more effective than webct, and much better looking.

Better than WebCT

Communication and quizzes are more difficult in Moodle then in WebCT. I had a hard time figuring out how to email the instructor directly with moodle mail. The discussion board seemed easy enough. I also updated my Norton midterm and suddenly for no clear reason my pop up quiz was blocked. I had never had any issues before, but my inability to find the cause (or adaquate help at the ?) at that point cost me 60 points! I now have to shut off all pop up blockers when I plan to use moodle-this has never been an issue with webCT. for me it's a very resource to use I did not like it. My instructor in this class was very difficult to contact and when I had problems with taking my tests in it, he was very unwilling to help.
I prefer using WebCT over Moodle. Moodle seemed a little more cumbersome than other online options. I think moddle is a great way to get a class done. Sometimes moddle has problems here and there but the over all outcome is great.
There are a few quirks with Moodle which made it finicky to use. I could not use Moodle on my laptop, when I went to take an exam it would ask if Moodle could access my clipboard. On my laptop I would click 'yes' and it would keep giving me the popup. I could then only answer questions by carefully clicking the 'OK' button on the popup and then clicking on my answer. That really makes it hard to take a test. Another quirk was after the first couple of quizzes, moodle stopped reviewing with you which questions you missed. After taking a test, you submit it, then you can review it (without any indication if you answered correctly or not), then you go to grades and see what your score was. There is no way to review the test, seeing which ones were correct and which ones were incorrect. Worked fine for me, but I know a lot of other people had problems with it just from the general discussions going on. It just didn't seem as airtight as webct.

Moodle is ok to use, I think that there are better programs out there. I find Blackboard more helpful.

I can’t stand Moodle. I have tried to be patent but the moodle set up is inferior to web CT. The thing I HATE the most is; NO internal e-mail attachment option. I can’t submit assignments in my class how dumb is that? Who wanted to use this dysfunctional program? Anther problem with moodle is every time I click on it states that this program is not secure. All this week I had to log in twice. What is up with this system? I would prefer to go back to Web Ct. the e-mail system was better and the discussion tool was better. O.K I’ll just say it everything was better on Web Ct. Why did we switch to such a bad system? Everyone does know that students in an Internet based course need to send attachments to their teachers. RIGHT I think that Moodle has been hard to orient to. I have had other internet classes and have not had problems with knowing what expectation there were and where to post assignments discussions and so forth. I have not been able to view any grades in the moodle system as yet.

I am not impressed with the communication opportunities in moodle. I also do not like that it is hard to keep different conversations threaded. Moodle has been an awful experience. The instructor keeps trying to use a new Moodle gimick each week. I am constantly lost. I also have not appreciated the continous updating of Moodle during a class. Why did the icons and background change? I can never count on Moodle.

I don't really appreciate the e-mail posts either. I get them once a day. It just adds another place to look to make sure I didn't miss anything..

Sometimes we have more than one attachment, for instance, an article and a paper. There is not enough space on quickmail to attach both, nor can much be attached to a "reply" in a thread. You have to go to ISU web mail to do that but there is no direct link that I can see.

Wiki format is very difficult to edit and add to when the class is large and others have already submitted.

In all, this is a much more confusing format than Web CT. I would change back in a minute if I could.
The most difficult part is the email component as it is difficult to access sent emails.
I can't stand Moodle. I have tried to be patent but the moodle set up is inferior to web CT. The thing I HATE the most is; NO internal e-mail attachment option. I can't submit assignments in my class how dumb is that? Who wanted to use this dysfunctional program? Anther problem with moodle is every time I click on it states that this program is not secure. All this week I had to log in twice. What is up with this system? I would prefer to go back to Web Ct. the e-mail system was better and the discussion tool was better. O.K I'll just say it everything was better on Web Ct. Why did we switch to such a bad system? Everyone does know that students in an Internet based course need to send attachments to their teacher.
Difficult to navigate and the discussion boards were horrible to follow!! Overall I felt this was a poor format and found the WebCT to be much easier and very straightforward.I don't like it as the information seems a lot more difficult to find in this program. I am not always sure that I have everything I need. The instructors could do much better in utilizing the different features. I think it has many featurs that are an improvement over other similarproduct. I particularly like the ability to see every one's comments at once in a discussion, without having to open. Discussion in writing is already less ideal that face to face, and being able to see multiple comments is much more like a real conversation. I think moodle is all pretty colors and nice graphics and non-functional. Moodle is Anna Nichole Smith vs Steven Hawking, with Moodle being the late, albeit lovely Ms. Smith. My grades have actually slipped because I can't use moodle appropriately. It takes forever to go from one field to the other and you can't see what others have written or read them in context, no matter how you set your "options". I do appreciate spell check, but overall, moodle is all flash and little substance. I am angered that I am putting myself in so much debt to get a half-assed education further compromised by insane software. Moodle is perhaps the most unwieldy, horrible program ever. I have taken correspondence classes in the 80's, blackboard and web CT more recently and while they all had their problems, I could not say, as I can with moodle, that they unequivocally sucked. Moodle was a horrible decision that will ultimately hamper student performance and further deteriorate ISU efficacy and respectability in the learning co I think web ct or blackboard is easier to keep track of. Moodle training would be very helpful. I am afraid I am not using Moodle to the fullest, I find stuff all the time and this is my 2nd semester of moodle.
I used WebCT prior to Moodle and found WebCT to be more user friendly. Having to look in two different places for course mail was inconvenient. In WebCT it always indicated if you had new mail and was easier to use. The discussion tool in Moodle is inferior to WebCT as well. Many students complained about the difficulty and time it took to sort through the discussions that we had already read and the new ones because they were all posted according to the "parent" thread. In Moodle it was nice to be able to see weeks in advance but this and a few others advantages did not compensate for the loss of functionality and user friendliness in comparison to WebCT. I recommend Blackboard or WebCT.

It is o.k. Maybe because it just takes getting used to, but I preferred the Web CT. Moodle seems to be too busy and has too many different paths to find the same thing. I feel like I could be missing something and sometimes have, not realizing a notice or assignment was posted in a particular area. What would be really nice is to have a quick link from moodle to the library site like Web CT did!!!!!

It is very confusing and difficult to follow. It is VERY VERY frustrating to use both moodle and CT web, as I am currently doing. It is also VERY frustrating that you keep changing it in the middle of the semester! Please stop! I feel that if I'm paying full time tuition, and not using the ISU campus, that ISU could pay for a quality web based program. Just being honest. Not user friendly. I didn't like the fact that none of us new we were going to use Moodle until the first day. It took me 2 weeks to navigate the course before I was confident I wasn't missing something. Too many icons and avenues.

I found Moodle less cumbersome than WEBCT and found it easier to navigate to areas in the course. The vertical approach and format was easier to see and understand than in WEBCT.

Confusing. Too many navigation problems. Never understood link between moodle and e-mail system completely. I preferred Webct. especially at first. I got a little more use to moodle later, but still not a huge fan.
I find it very tedious and not user friendly and since the upgrade it is even more difficult. It is more difficult to find and use things such as the moodle email and things like that. WebCT was easier to use than Moodle has been.

Making the transition from web-ct to moodle has been difficult. Not only am I trying to learn my subject material but I am trying to figure out moodle and how to access items in the class. Have had difficulty accessing the distance learning presentations- I do not always get picture and sound and am unable to complete the study of the material. Web-ct was more user friendly.

I have yet to find where the grades are posted. Not sure where I would find the posting of the grade. Guess when I get it posted in my isu portal at the end of the semester I will only know my class grade.
unable to submit powerpoint assignments due to size constraints

It's better than WebCT, about the same as Blackboard. When you send a message to someone it should pop up on their screen like a messenger.

good

Moodle is okay. I didn't like taking tests and wondering if my answers were being saved. WebCT had a thing on the side that would say if you saved an answer or not. I really like that feature. Overall, I prefer WebCT.
it took some getting used to, the professor was willing to ask as we went along and he made changes that helped. the exams occasionally drop answers-I would like a "you have not answered all the questions" note before I submit for grading. I have a hard time moving from the different levels of moodle. It will sometimes dump me out and I have to sign in again. Now I minimize each page so I can stay in the program until I am done with my session. Overall I think with a tutorial (and time to do one) moodle has great promise. My one professor that is using it does a great job with it.

I think that Moodle is a good program. I did prefer it over webct and would think that it would be an asset for the university to embrace across the board.
It is easy to use. The only things I don't like is the pop-ups saying it is an unsecure site and that it works best with mozilla firefox.

Appendix IIIC

Faculty Survey Result by Courses (Questions 1-14)

		I_AM_COM	I_CAN_EA	I_DID_NO	I_FIND_AS	I_FIND_CO	I_FOUND_	I_HAVE_U	I_PREFER	I_THINK_T	I_WAS_AB	MOODLE_	MOODLE_	OVERALL_	ORGANIZA
Respond	COURSEN	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
1		a	b	a	b	b	b	a	c	c	c	a	b	a	a
2		a	a	a	b	a	a	a	a	b	b	a	a	a	a
3		a	c	c	d	d	b	a	d	d	d	d	d	d	b
4		a	a	a	a	a	b	a	a	c	a	a	a	a	a
5		a	b	c	c	d	b	a	d	b	c	c	c	d	b
6		a	b	c	c	b	d	a	c	c	d	c	c	c	a
7		a	a	a	b	b	a	a	b	d	f	a	b	a	a
8		a	a	a	f	b	a	a	a	a	f	a	a	a	a
9		a	a	a	a	a	a	a	a	b	a	a	a	a	a
10		a	b	c	c	b	b	a	c	b	f	c	b	c	c
11		a	a	b	b	a	a	a	a	a	c	b	b	a	b
12		b	b	b	f	b	b	a	b	c	f	b	b	b	a
13		a	b	c	c	d	c	a	d	b	c	c	c	c	b
14		a	b	c	c	c	b	a	d	b	d	c	c	d	c
15		a	b	b	b	b	b	a	a	d	b	c	a	a	a
16		b	d	d	d	d	c	a	d	c	d	d	c	d	d
17		a	a	a	b	b	b	a	a	b	b	a	a	a	a
18		a	b	a	c	b	c	a	b	a	b	b	b	a	a
19		a	a	a	b	c	c	a	b	b	c	b	b	b	b
20		a	b	b	b	b	b	a	b	b	b	b	b	b	b
21		a	a	a	b	a	b	a	a	a	b	b	a	a	a
22		a	a	a	a	a	a	a	a	b	a	a	a	a	a
23		a	a	a	b	a	a	b	a	b	b	a	a	a	a

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Did Not Answer	f	0	0	0	2	0	0	0	0	0	4	0	0	0	0
Strongly Disagree	d	0	1	1	2	4	1	0	5	3	4	2	1	4	1
Somewhat Disagree	c	0	1	6	6	2	4	0	3	5	5	6	5	3	2
Somewhat Agree	b	2	10	4	10	10	11	1	5	11	7	6	8	3	6
Strongly Agree	a	21	11	12	3	7	7	22	10	4	3	9	9	13	14
	Total	23	23	23	23	23	23	23	23	23	23	23	23	23	23

Total # Faculty S07 **69**
Total # Responses **23**

Percent Response **33%**

Appendix IVC

Faculty Survey Result by Courses (Question 16)

Faculty Survey Overall Impressions

Response#1 - I like it, I just have not had time to learn everything, like the gradebook for example. Once I am forced by need into doing that, I don't think I'll have any problem. I would be fine with going to Moodle as our LMS this fall. I think it is easier to personalize in some ways now that I know how to download and manipulate pictures. The ITRC will have lots of work transferring courses in the summer!

Response#2 - I strongly prefer Moodle over WebCT; The user interface is easily understood. The ITRC staff (Randy Stamm and Kelly Shoemaker) provided the right amount of guidance and instruction in Moodle to allow me to enter my course information. I'd like to use other Moodle features, linking RSS feeds is one example, with appropriate sites for the course. (e.g. health related, cnn.com, etc.)

Response#3 - We were part of the pilot and felt obligated to try the authorware thoroughly. The tool caused havoc for both teachers and students. I enjoyed the wiki and the webliography capabilities of the tool. The rest was problematic. It did not allow a continuous design over the course but demanded a weekly set up which gave the course a choppy feel. The forums, grades, assignment tools are especially badly formatted in this tool. The forums do not allow students or teachers to see what has been read, nor does it put things in a linear format for organization (no matter which alternative view I used). The way forums are organized in general is problematic and not conducive to class discussions which are the backbone of graduate study. The grading system did not give me control. I could not put up a list of assignments with grades and weights and control the sheet. The grading tool was tied to the assignment tool (very poor design). I did not have the power to keep students informed of their participation grade each week, or of paper grades, check-offs etc. This was a most frustrating and work producing tool. It did not enhance communication between students and teacher. The assignment and forum tools only allowed one attachment when many of mine require more than one (for instance turn in an analysis of a journal article and the article). Students turned to email to solve these problems. The lack of affordance regarding messages read galled. Students and teachers have to manage their time well in totally online courses because the medium requires more time than a face to face class. The lack of affordance meant that messages were reread. The discussions lack a feeling of continuance. People never became comfortable so they could debate. The software got in the way. I vote to put aside this tool and go with Blackboard. Even the old version of WebCT is better than this tool. I expected to vote for the shareware because I believe in it philosophically, but I found the tool lacked the sophistication needed for a robust graduate course.

Response#4 - I found Moodle to be very intuitive and user-friendly, as did my students. It is vastly more flexible than WebCT and allows for a much greater range of activities. Overall, it represents a substantial advance over the previous system, and I'd certainly recommend its adoption.

Response#5 - I have found most aspects of moodle to be more difficult to use than WebCT. The discussion makes it difficult to follow threads and find the new postings at the same time. The homepage is not conducive to learning and it is difficult to put my own creativity in the class! I think that moodle is much less intuitive than WebCT and even though I have had few problems using it, those who are very computer literate will have much difficulty. I realize moodle is free but "you get what you pay for".

Response#6 - My general impression is that it is not good enough to meet my needs. Moodle was good for basic things, such as handing out content, short/focused discussions, and sending email. Problems with it included: difficulty with discussions that had many postings (even for a small group of 5 people and a 1-week activity, it was very difficult to locate specific messages),amount of labor for me as the instructor in creating small groups (the interface makes this process very slow)the gradebook just didn't work correctly the questionnaire tool was very difficult to work with and would not allow questions to be imported the way screens loaded when connecting between course sites created a lot of confusion for me and for my students it seemed we would encounter a new/different bug every week and it would take

days to figure out, sometimes not ever being figured out the management of students (adding/removing) was really difficult with the way they are listed on that screen. Sometimes it would take 5-10 minutes just to locate a name on the list. The search feature just didn't help, students turning off the feature to send messages to their email accounts. Students and I having messages get stuck in spam mail filtering. Overall, there were so many problems that I did several things externally that I would otherwise have done online. I ran out of time to figure out how to make Moodle work for some things because I was dealing with so many problems.

Response#7 - It would be nice in the discussion area, if there was a way to easily and quickly identify new postings once you click on the 'unread' link. I love being able to have students and faculty post pictures because it makes me feel like I can see who I'm talking with during discussions. Links to assignments and discussions are much easier than in WebCT.

Response#8 - Much easier to navigate in than WebCT. Because this is my first semester, I have not had the chance to export grades or use the assessment tools. The only negative I can think of is when students email me from Moodle the message comes to me garbled at the top then clean at the bottom.

Response#9 - I really, really, really like this software so much better than WebCT. The grade book is fabulous. The ease and flexibility of adding content is far superior to what can be done in WebCT. This semester I used the Wiki feature, which was a great tool to use in the classroom. What more can I say! I like it. I hope ISU adopts this software. I have used both Blackboard and WebCT and find this software to be so much better than either.

Response#10 - There are specific aspects of the product that I am still trying to negotiate, but my overall impression is that with better support, Moodle is definitely the option we should use for our new LMS

Response#11 - I have primarily used the course content and forum components of Moodle and have not used the grading tools. So far, it has met most of my needs and I have only one request for changing how the discussion postings that have been read/not read are tracked by the course instructor. Moodle has been easy to use, easy to customize, and my students have only contacted me 1-2 times regarding technical difficulties.

Response#12 - I did not like it as well the second time through. The email is a real problem for me. Some students have disabled the email because they don't want their ISU account being cluttered. For me, I lose track of emails connected to the course because they are in my regular email. I much prefer the system of course-contained email in WebCT. I also dislike the inability to attach more than one document at a time to a forum posting. I had thought I would get used to the vertical linear look of the site, but I still don't like it. Overall, I am less in favor of Moodle than I was in the initial trial.

Response#13 - Very Busy; not well organized

Response#14 - Moodle is far superior to WebCT and I will continue to use it. However it still has some interesting quirks that make running the actual schedule somewhat inconvenient. I sincerely hope that Moodle remains available as I will continue to use it for other classes, but will not use WebCT.

Response#15 - I do not like it at all.

Response#16 - It's more flexible and relatively intuitive. I like it.

Response#17 - Adequate and most students seem to like it. It's awkward to have to post the same documentation across multiple classes.

Response#18 - Overall good - #1A need - selective release to students - being able to have 1 student have access or view a make-up quiz, assignment, book, etc and all other students have no access or can't even view. #1B need - an email system within moodle that is more like webct - so that it stays in moodle and I can turn off the ability to go to my personnel e-mail as well as turn off the personnel e-mail for my students. That way I have all the message history in only moodle (both mine and the students). The new grade book is much better - however, being able to import grades from a spreadsheet would make the grade book more usable still having problems uploading a file from your computer into a page of a book - sometimes it works, but most of the time it is necessary to upload the file into moodle file area first, then add the content to a book glossary links are quite cumbersome - I have to manually remove them from quiz questions - also from lesson questions. Calendar links - it would be nice to have control if they show or not - as soon as I add an assignment or quiz, they are automatically linked in the calendar. I would like to determine if those links show or not. It would be nice to be able to move the topic areas like the resources or any other content - move the topics one at a time is very cumbersome. It would be good to be able to add words to the dictionary for the spell check lesson tool is good, I have been using it throughout the semester - only problem is I have to create a new lesson (a copy) for students to review the lesson after the lesson period is up. It is ok to create a new one, but the students can't see what they answered previously. Books are good - It would be nice to be able to see the tracking for each page/chapter of the book gradebook plus is a great improvement Hot potato quizzes are wonderful tracking is great (except for the book) Overall moodle is good and fairly user friendly once you get the hang of it - as with any new technology is has its limitations - but transition has been an overall positive experience - the help of the ITRC has been great -without the personnel help (and getting me out of problems that I created - by deleting things), the transition would be very difficult

Response#19 - I've really enjoyed Moodling, and I think the interface is fairly straight forward. However, I do think the help topics could be more detailed. I think there are still some unresolved issues with Moodle:

- Cannot successfully transfer files using WebDAV.
- Html files transferred via WebCT did not import correctly.
- Only part of the file imported (cuts off in the middle).
- Cannot import glossary terms (without transfer from WebCT).
- Quizzes are auto-linked to the glossary (need a quiz setting to stop auto-linking).It would be nice to be able to use the auto-link function of the glossary for the rest of the course, but it should be optional for quizzes and assignments, etc. calendar automatically shows submission due dates (even for make-up assignments that not everyone needs to see).

Response#20 - Significant improvement over WebCT, including within the interface and, more importantly, with overall student acceptance. Students in my class have indicated unsolicited that they are enjoying using Moodle, and those who have indicated that they have used WebCT previously offered that they preferred WebCT.

Response#21 - I think it is much more intuitive to use than WebCT. I hope the university picks Moodle.

Response#22 - Most things were easy to figure out . Occasionally I needed help trying to find the best way to accomplish a task. Also, sometimes I didn't realize that I could do something a different way, that is where some training would have been helpful. Overall I liked Moodle.

Appendix IV

KCHFAC Moodle Issues and Concerns

Kasiska College of Health Professions Faculty Advisory Committee (KCHFAC) Moodle Issues:

1. Email: the emails from students come directly to my ISU email site. Very difficult to organize and more importantly track. They also get mixed up with the other email. . Emails are multiple and don't link back well to Moodle to find where it belongs and with long discussions things start to get muddy and lost.

2. Tests: coding test questions is an issue in terms of getting info back easily and it won't function in the way that we do the analysis. When the test analysis is done in Moodle you end up with many pages that are hard to sort through instead of one to two pages (our tests usually are over 100 questions). Can't randomize test questions the way that we do.

3. Grading: grading is an issue on a few fronts--scoring can only be done in whole numbers, can't import grades, grading requires 5-6 course spaces for clinical year students instead of one . Can't combine elements from different courses together which is driven mostly by the grade book issues

4. Surveys: not anonymous while making sure that all students have completed the survey. Can't import questions into the survey. Survey interface for user is a problem.

5. Students: Student discussion/forum. There are limited ways for students to post and then follow through on discussion. I end up doing a lot of student posting. Student feedback. Students have been very frustrated with learning the new system. Interestingly, they for the most part now do all emailing to me via direct ISU Email.

6. Inefficient System: great increase in labor to try and accomplish what we need and still can't get there completely, this of course turns into inefficiencies and increased time. While our ITRC person is very, very helpful, I have required a lot of time with her and I still am not using probably 80% of what I understand Moodle is capable of. Navigation doesn't work for how our courses run. Class organization defaults to weeks (pre set up) versus topics or modules. Although I understand that the weeks can be changed to other topics, it became very difficult and frustrating to do that and it was easier to work within the predetermined format. File size. Students do PowerPoint presentations (maybe 39 slides) but with a narrative that ends up being quite large in file size. These presentations must be broken down into 2-3 parts to post. Continual need to up grade rather than have a finished product will work. Moodle is programmable but who cares if it doesn't do what we need.

7. Overall: We are being asked to decrease our capability for Moodle when WebCT version 6 will allow us to continue at our current level and even do better. WebCT 6 has been evaluated by us and is well beyond Moodle and meets and exceeds our current needs. Moodle as it currently is will end up dictating how we will function with our students rather than the technology helping us to do a better job with our students. Moodle is labor intensive and costly to us. One of the frustrating things through all of this is the appearance that Moodle seems to have been decided on before hand and is being pushed through despite the problems and concerns.