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 I.

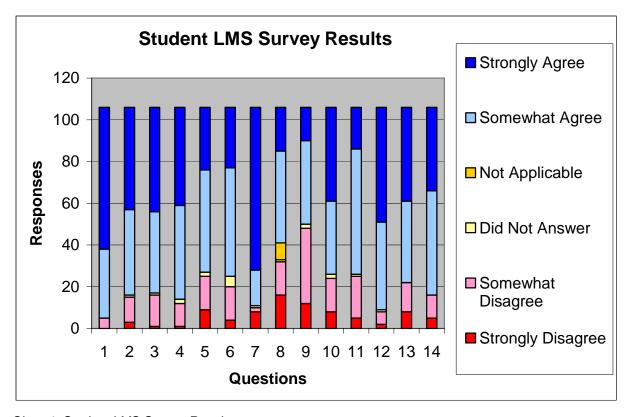


Chart 1: Student LMS Survey Results

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 II.

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 III.

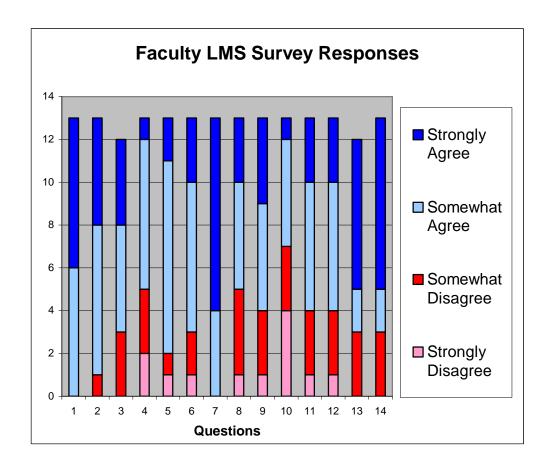


Chart 2: Faculty LMS Survey Results

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 IV.

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 I and Appendix III.

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 I

Student Survey Result by Courses (Questions 1-14)

ECDONICE COURCENIANT														LL_ORGANIZ
ESPONSE COURSENAME		Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
1 ACAD 102 - 09	а	b	b	b	а	C	b	b	C	C	b	а	a	а
2 ACAD 102 - 09	а	b	b	b	С	b	b	b	b	b	b	а	b	а
3 ADRN210	b	С	С	b	b	b	а	d	f	b	С	а	b	b
4 ADRN210	а	b	b	b	b	b	a	b	С	а	b	b	b	b
5 ADRN210	а	b	b	С	С	d	а	е	d	С	С	b	d	С
6 ADRN210	а	b	b	b	d	С	а	d	а	d	С	b	b	С
7 ADRN210	а	а	а	b	С	b	а	d	С	b	b	b	С	b
8 BA 200	b	а	b	а	а	а	а	b	а	b	b	а	b	b
9 BA 301	b	а	a	а	а	а	а	b	b	a	а	b	a	а
10 BA 400 Professi	n a	b	b	b	b	b	а	d	C	b	b	b	С	b
11 BA 400 Professi		a	a	a	a	a	a	a	d	a	a	a	a	a
12 BA 400 Professi		b	b	b	b	b		b	С	b	b	b	b	b
13 BA 400 Professi		b					a				b	b		
			a	b	b	С	a	a	b	a			a	a
14 BA 400 Professi		С	С	b	С	С	b	d	C	а	С	b	С	С
15 BA 400 Professi		а	а	а	а	а	а	b	b	а	а	а	а	а
16 BA 400 Professi		b	а	b	а	b	а	d	а	а	b	а	b	а
17 BIOL 101	а	а	а	а	b	С	b	С	а	b	С	b	b	С
18 BIOL 101	а	b	а	b	b	а	а	е	b	С	С	b	d	а
19 BIOL 101	а	b	b	а	b	b	а	b	С	b	С	b	b	С
20 BIOL 101	а	а	b	а	а	а	b	а	С	а	а	а	а	а
21 BIOL 101	b	а	b	а	b	b	а	b	С	а	b	а	а	b
22 BIOL 101	a	а	a	a	a	a	d	b	d	a	a	а	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	а	а	a	а	a	b	а	b	d	а	b	a	а	b
28 BIOL 101	а	С	b	С	d	С	а	е	а	С	С	b	С	d
29 BIOL 101	b	b	b	b	b	b	b	b	b	С	b	а	а	b
30 BIOL 101	а	b	b	b	b	b	а	С	а	b	b	b	b	b
31 BIOL 101	b	b	b	С	С	С	а	d	b	С	С	b	b	b
32 BIOL 101	b	b	b	b	f	f	b	b	а	b	С	b	b	С
33 BIOL 101	b	b	а	b	b	b	a	С	b	а	b	а	b	b
34 BIOL 101	а	С	a	b	b	a	a	b	b	b	b	а	a	а
35 BIOL305	a	a	b	a	b	b	a	b	С	b	b	b	a	a
36 BIOL305	a	a	a	b	b	b	b	h	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	a f	f	Ď	a f	f	f	a f	b	a b	a b	
	a	•	•	•	·=	- 1	•	•		•	l L	f f		b
39 BIOL305	С	С	С	b	С	b	а	b	b	С	b	•	b	b
40 BIOL305	a	а	а	a	a	а	a	а	С	а	b	а	а	а
41 BIOL305	b	а	а	b	b	С	а	а	С	а	b	а	а	а
42 BIOL305	а	b	а	b	С	а	а	d	С	а	b	а	а	b
43 BIOL305	а	а	а	а	а	а	а	b	b	а	b	b	b	b
44 BIOL305	a	а	а	а	а	b	a	b	b	а	b	а	а	b
45 BIOL305	b	b	С	b	b	b	а	b	С	С	b	С	b	b
46 BIOL305	а	а	а	С	b	b	а	b	С	а	b	а	а	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	С	d	b	d	d
49 BIOL305		b	b	b	b	b		b	-	b	b		b	b
	a						a		C			а		
50 BIOL305	b	а	а	а	а	b	а	а	b	а	b	а	а	а
51 BIOL305	а	а	а	а	a	а	а	е	С	а	а	а	С	а

52 BIOL305	b	b	b	b	b	f	а	b	С	а	b	b	b	b
53 BIOL305	а	а	а	а	а	а	а	а	а	а	а	а	а	а
54 BIOL305	a	С	С	b	d	b	а	d	d	С	С	С	С	b
55 BIOL305	b	b	b	b	d	b	d	b	b	b	b	b	b	b
56 BIOL305	а	а	b	С	b	f	а	а	d	С	b	b	а	b
57 BIOL305	а	b	b	b	b	b	b	b	b	b	b	а	b	b
58 BIOL305	b	b	b	b	b	b	а	b	b	b	b	а	b	а
59 BIOL305	С	C	C	С	C	C	а	e	b	C	C	С	C	С
60 BIOL305	a	b	b	b	b	a	а	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	а	b	a	а	a	b	a	a	b	a	a	a	a	a
66 BIOL305	b	b	b	b	b	b	а	b	b	b	b	b	b	b
67 BIOL305	b	b	а	а	b	b	а	b	C	b	b	С	а	a
68 BIOL305	а	а	а	а	С	b	а	b	b	а	а	а	а	b
69 BIOL305	b	b	С	b	С	b	d	С	а	b	С	b	С	С
70 BIOL305	а	а	b	а	b	b	а	а	d	b	b	b	а	а
71 BIOL305	а	а	а	а	а	а	а	а	а	а	а	а	а	а
72 BIOL305	а	а	а	а	b	С	а	е	d	d	С	а	С	b
73 BIOL305	b	С	С	С	С	d	а	е	а	b	С	b	d	С
74 BIOL305	а	b	а	а	b	С	а	d	b	С	b	а	b	b
75 BIOL305	а	а	а	b	а	b	а	b	С	а	b	а	b	b
76 CIS 301	а	С	а	b	b	С	С	а	b	b	b	а	b	b
77 CIS 301	а	b	a	a	a	b	a	а	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	С	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	а	а	а	a	b	a	a	b	C	a	b	b	b	b
84 DENT201	a	а	а	а	а	а	b	а	b	а	а	а	а	a
85 DENT201	b	a	a	a	b	b	а	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	а	b	b	b	С	b	b	d	С	d	С	b	b	а
88 ECON202	а	а	а	а	а	а	а	С	d	а	а	С	а	b
89 ECON202	b	d	С	d	d	d	а	е	b	d	d	С	d	d
90 ECON202	а	а	b	а	b	b	а	а	С	а	а	а	а	а
91 English 101-12	а	а	а	b	b	а	d	а	b	а	а	а	а	а
92 English 101-12	b	b	b	b	b	b	b	b	С	С	b	b	b	b
93 English 101-12	а	а	а	а	b	b	а	b	С	b	b	а	а	b
94 English 101-12	b	b	а	b	b	С	а	b	С	а	b	а	а	а
95 English 101-12	С	b	С	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	С	b
100 English 101-12	b		a		a	a b	b	b	a C	b	b	b		
•		а		a									а	a
101 NURS633	a	С	C	С	d	C	a	е	a	f	d	b	C	C
102 NURS644	b	С	b	С	С	d	a	е	С	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	С	b	d	b	а	d	С	d	С	b	С	С

	105 PA CY	a d	d	b	d	С	а	е	b	С	d	d	d	d	
	106 PA CY	a a	а	а	b	f	а	b	С	С	b	b	b	b	
f	Did Not Answer	0	1	1	2	2	5	1	1	2	2	1	1	0	0
е	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 Disagi	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
а	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
е	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
С	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
а	Strongly Agree	68	49	50	47	30	29	78	21	16	45	20	55	45	40

Appendix II

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. I 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 individually keep track of assignments 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 environment

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 III

Faculty Survey Result by Courses (Questions 1-14)

	I AM	CONT CAL	N EAI DID	NO ⁻ I FIN	D ASI FIN	ID C(I FO	UND I HA	VE UI PR	EFERI TH	INK_TI_WA	S AEMOO	DLE MOO	DLE OVER	ALL ORG	SANIZ!
Respo	nd COURSENQ1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	
	1 Moodle Pilcb	b	С	b	b	а	а	b	а	С	b	а	а	а	
	2 Moodle Pilca	а	а	b	а	а	а	а	С	b	а	а	а	а	
	3 Moodle Pilca	b	b	d	d	b	а	b	С	d	С	b	а	b	
	4 Moodle Pilcb	b	С	d	b	d	b	d	С	d	С	С	С	С	
	5 Moodle Pilca	а	b	b	b	b	а	b	b	d	b	b	b	а	
	6 Moodle Pilcb	С	С	С	b	С	b	С	b	С	d	С	С	С	
	7 Moodle Pilca	а	а	b	b	b	а	а	b	С	b	b	а	а	
	8 Moodle Pilca	b	b	b	b	b	а	b	а	b	b	С	а	а	
	9 Moodle Pilcb	а	а	а	а	а	b	а	b	а	а	b	а	а	
	10 Moodle Pilcb	b	b	b	b	b	а	С	а	b	b	b	b	b	
	11 Moodle Pilca	b	а	b	С	b	а	С	b	b	а	а	а	а	
	12 Moodle Pilcb	b		С	b	С	а	С	а	d	С	b		С	
	13 Moodle Pilca	а	b	С	b	b	b	b	d	b	b	d	С	а	
d	Strongly Di	0	0	0	2	1	1	0	1	1	4	1	1	0	0
С	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
а	Strongly Aç	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
С	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
а	Strongly Aç	7	5	4	1	2	3	9	3	4	1	3	3	7	8

Appendix IV

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.