Course Management for LMS-based
Blended Learning:
Blackboard vs. Moodle

Presenter: Terumi Miyazoe

Overview

- Design points and goals
- LMS (Blackboard vs. Moodle)
- Blended course design
- Data collection
- Results and analysis
- Discussions and conclusions

○ A view of Blackboard

○ A view of Moodle

Prior studies

Not many detailed studies (published) comparing teaching and learning between Blackboard and Moodle.

- Bremer & Bryant (2005): Moodle is better
- Munoz & Duzer (2005): Moodle is better
- Betty & Ulasewicz (2006): Moodle is easier to use but Blackboard is better for instructor feedback

Design points and goals

- LMS (Learning Management System) implementation
- Blended learning: mixture of face-to-face and online learning
- Encouraging interaction among students in English
- Enhancement of expression and writing ability in English

Significance of the study

- More descriptive and analytical
- Blackboard and Moodle groups have no experience of using the other →purer comparison.
- The course designs and the usage of the two LMSs are semi-identical and highly controlled.
- Identical survey tools are used for both groups.
- The instructor avoids affecting students' performance and evaluations as much as possible.

Teaching contexts

- Period: 2007 spring semester
- Location: Two universities in Tokyo
- Content: English for computing (ESP) and English for academic purposes (EAP)
- Year: 1st and 2nd year students
- Duration: about 15 weeks
- English Level: intermediate
- Class size: 25 to 30×2 respectively

Student Demographics 1

- Blackboard group

  - 1st year students with concurrent blended learning courses

  - majors: computing and web design

  - age: 18~19

  - 63 students registered

  - Blackboard Academic Suite 7.1

Student Demographics 2

- Moodle group

  - 2nd year students with no prior experience of blended learning

  - majors: system design and city planning

  - age: 19~21

  - 50 students registered

  - Moodle version 1.7.2+

Blended course design 1

- Semi-identical usage of LMS was planned for both universities

- Four features commonly used in both universities:

  1. announcement from the instructor every week
  2. presentation of the course materials every week
  3. delivery of the audios for all units
  4. short assignments using Forum (BBS) every two weeks

Blended course design 2

- In addition to 15 full meeting classes using the system, the LMS was used for asynchronous discussion assignments.

- Minimal posting is required in order to minimize the burden and stress on students.

- Grading policy (same for both universities): 30% attendance, 30% assignments, 40% mid-terms & final exams.

LMS for language teaching and learning 1

For teachers: Positive points

- Easy delivery of authentic audio-visual materials
- Easy linkage to other static/interactive digital resources
- Easy course management such as grading, attendance check, etc.
- More time for preparation and refinement
- Reusable and shareable over semesters and with others

LMS for language teaching and learning 2

For teachers: negative points

- Need necessary IT/ICT skills
- Need necessary infrastructure/equipment
- Could be overloaded by
  - planning
  - e-materials making
  - care of online activities outside classes
  - care of student technical problems both in and outside of class-time

LMS for language teaching and learning 3

For students: positive points

- Access from anywhere, anytime, outside the classroom
- Ease of student self-paced self-study
- Higher collaboration and interaction among students
- Higher connectedness to others

LMS for language teaching and learning 4

For students: negative points

- Non-techie type students could suffer
- Those without PC/Internet at home would be disadvantaged
- Risk of overload outside the normal classes
- Those who do not like the blended design would see more demerits

Views of the course on LMS

○ Audio delivery (BB)

View of the course on LMS

○ Supplementary Content Delivery - Moodle

View of the course on LMS

○ Discussion Forum - BB

View of the course on LMS

○ Discussion Forum - Moodle

Data collection 1

- Pre-course questionnaire regarding overall student ICT readiness and online learning experiences

- Post-course questionnaire regarding student demographics, notions about online interaction, and evaluations of the blended course delivery
  - 20 five point Likert scale questions
  - open questions

- Written informed consent for data analysis and publication

Data collection 2

- Respondent specifications

	Blackboard	Moodle
Initial course registration	63 students (two classes)	50 students (two classes)
Survey respondents	58	46
Valid samples	51 (88%)	37 (80%)

Note: Valid samples = those who gave consent and whose answers were complete enough to be included in the analysis.

Methods of analysis

- Five point Likert scale questions: Statistical analysis on SPSS
  - Frequency
  - t-test
  - correlation
  - group analysis

- Open-ended questions: Count the frequency of similar ideas and group them

Questionnaire 1 (extract)

Q.1.1 How long have you used a PC?

Q.1.2 Do you have an Internet connection at home?

Q.1.3 How many hours do you use a PC per day?

Q.1.4 Tell me the software you frequently use.

Q.1.5 Do you use a portable phone? If yes, for what purpose?

Questionnaire 2 (extract)

Q.12 Posting your reports and opinions on Moodle/BB Forum was,
painful 1-2-3-4-5 enjoyable

Q.13 The reports and opinions of others on Moodle/BB Forum were,
rarely read by me 1-2-3-4-5 mostly read by me

Q.14 Reading the reports and opinions of others on Moodle/BB Forum was,
painful 1-2-3-4-5 enjoyable

Questionnaire 3 (extract)

Q.8.2 Regarding the activities in class and assignments set on Moodle/BB,
I mostly did not participate 1-2-3-4-5 I mostly participated

Q.9 The Forum on Moodle/BB was
Difficult to use 1-2-3-4-5 Easy to use

Q.17 On the whole, how did you like the class design of blending Moodle/BB?
I didn't like it 1-2-3-4-5 I liked it

## Finding 1: Students' overall evaluations of LMS blended courses

Students' evaluations on blended learning — Dislike (1) – Like (5); Blackboard and Moodle
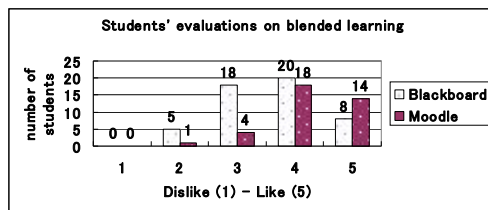
Q.17 Moodle group (m=4.22) liked the blended course more than Blackboard group (m=3.61).

Finding 2: Comparison between blended learning and traditional learning

Blended vs. Traditional learning — Prefer traditional (1) – Prefer blended (5); Blackboard and Moodle
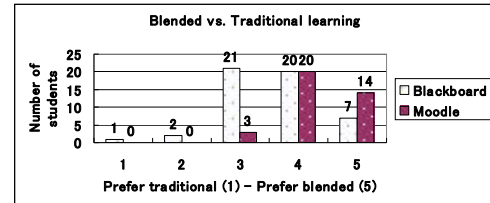
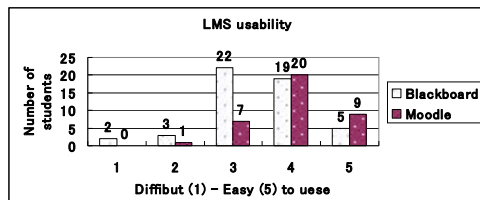Q.18 Moodle group (m=4.3) evaluates blended learning as better than traditional learning more highly than Blackboard group (m=3.59).

Finding 3: Students' evaluations on LMS usability

LMS usability — Diffibut (1) – Easy (5) to uese; Blackboard and Moodle

Q.9 Moodle group (m=4.0) finds the LMS easier to use than Blackboard group (m=3.43) even though it was their first time to use it.

Finding 4: Correlation analysis of students' evaluations on blended learning

○ Q.8.2 concerns online interaction attendance (mean=4.13), Q.9 concerns the usability of LMS (mean=3.67), and Q.17 concerns the students' liking of LMS-based blending learning (mean=3.86), α<.005.

→ Students' higher evaluation of Moodle over Blackboard could partly be explained by greater ease of use of Moodle.

Crucial points

1. Overall, significantly higher evaluation of blended course design over traditional teaching.

2. Even though the Blackboard group is more familiar with LMS, the ease of use is scored lower than the Moodle group who used it for the first time.

Discussion 1

- Ease of use of LMS could affect students' overall evaluations of a blended course.

- In particular for language learning where communication, repetition, and self-study are important for language internalization, could give more advantages than traditional teaching.

Discussion 2

- Moodle allows individual instructors to run an online course more easily but the necessary administrative process might be shouldered by him/her as well.

- The risk of both LMSs becoming unavailable at some point in the future is unavoidable.

Conclusions

- Choice of a good LMS can affect learning outcomes.

- More research is needed concerning which features of LMS have most impact on students' usability evaluations and their learning.

References

- **Beatty, B., & Ulasewicz, C. (2006). Faculty Perspectives on Moving from Blackboard to the Moodle Learning Management System** *TechTrends, 50*(4).

- **Bremer, D., & Bryant, R. (2005).** *A Comparison of Two Learning management Systems: Moodle vs Blackboard* **Paper presented at the Proceedings of the 18th Annual Conference of the National Advisory Committee on Computing Qualifications.**

- **Munoz, K. D., & Duzer, J. V. (2005). Blackboard vs. Moodle: A Comparison of Satisfaction with Online Teaching and Learning Tools.   Retrieved November 5, 2007, from http://www.humboldt.edu/~jdv1/moodle/all.htm**

- **Blackboard.com: http://www.blackboard.com**
- **Moodle.org: http://moodle.org**

More detailed report will appear in the online JALT conference proceedings under the title of

**A comparative study of EFL blended learning:
Blackboard vs. Moodle**

Thank you for your visit!!!