

# A Comparison of Learning Management Systems

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## 1 Introduction

The OECD recently reported that E-learning is becoming increasingly prominent in tertiary education (OECD 2005). A Learning Management System (LMS) is a software application that can manage online teaching and learning. According to Victoria University of Wellington (2006), every university has at least one LMS in New Zealand. There are open source and commercial versions of software on the market. The purpose of this paper is to compare two competing learning management systems – Moodle and Blackboard, from the views of different stakeholders: instructors, students and IT developers.

## 2 Description

Blackboard is the dominant commercial LMS, while Moodle is the popular open source LMS. (Bremer & Bryant 2005). Both LMSs provide a single platform to manage online teaching and learning. User management is password protected and users can be defined with different roles to different level access. Blackboard and Moodle use different terms to describe their functions, but they have similar functions with their own specialties.

## 3 Comparison

The debate whether organisations should move their commercial LMS to open source is still ongoing. Bremer & Bryant (2005), Machado & Tao (2007) and Munoz & Van Duzer (2005) conducted trials to compare the users experience between Blackboard and Moodle within the tertiary education sector.

These three studies show that students preferred Moodle because it was easy to use and had rich communication and collaboration tools. From developers' prospective, Moodle had more tools, was easy to incorporate multimedia elements and add desired features, while Blackboard had built-in survey and grouped resources, was easy for beginners to use. From the instructors' views, different users had different preferences, mainly from their experience and knowledge of LMS.

There is no doubt that Moodle has some advantages over Blackboard, but Blackboard still has many supporters throughout the world. It was found that "The preferred Learning Management System (LMS) used within the ITP sector in New Zealand was the proprietary system Blackboard", according to the Mitchell et al. report (2005).

Wainwright et al. (2007) study showed while four different colleges with similar size and needs have chosen a different LMS to support and maintain their online teaching and learning, the tools that the LMSs offer are very similar. The campus culture had a big influence on the decision making. One college chose Moodle because of its strong community based structure; another one chose Blackboard because of its content modules and course tools, and the attraction of file services area.

Machado & Tao (2007) believe an open source system gives users the freedom to develop the system they require and the ability to integrate existing products. However, the more you have developed the codes on the open source system, the more support you would need for maintenance and upgrade..

## 4 Conclusion

Based on the studies above, not all businesses with online education needs can afford the commercial products, but the development and maintenance of the open source system would greatly depend on the capabilities of the IT team within the business. Business or institutions should have their training / pedagogy strategy in place first before they consider purchasing or implementing the product. The flexibility and interoperability of the product, and the organisation culture should also be considered.

## 5 References

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