

# An Alternative Learning Platform to Facilitate Usability and Synchronization of Learning Resources

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## INTRODUCTION

The Internet was initially set up in the 1960s and 1970s for supporting research in the military. It was then developed in 1981 in the academic community to connect university computers to enhance communications between academic researchers so that they could efficiently exchange ideas about the ongoing research (Coyle, 1997). Files transfer protocol was frequently used for transferring of files and computer-mediated communication (CMC) was also popular in the education context. Formats of CMC include e-mail, bulletin board, and list servers. With the decreasing hardware and data communication costs and increasing bandwidth, the Internet has altered our options for living, studying, working, and entertainment. It appears to be the most powerful information technology tool for education in the 21<sup>st</sup> century. There are many reasons for its popularity, and the main reasons can be attributed to accessing information easily, freely, and speedily. It provides powerful search functions, enables synchronized communication such as video, audio conference, and chat, and enables multiple presentation formats such as animation and video streaming without any add-on software or hardware. In fact, the Internet is more than technology, it is a Web of social relations imaginatively constructed by symbolic processes initiated and sustained by individuals and groups.

Many universities are tapping into flexible ways of learning, and some universities provide comprehensive services for preparing educators for electronic learning (Huyng, Umesh, & Valacich, 2003; Shea, Fredericksen, Pickett, Pelz, & Swan, 2001). Insightful individuals and companies have thus blended the unique functionalities of the Internet and learning resources and developed consolidated learning systems called learning management systems (LMS). Different authors and companies have termed LMS in different ways; for example, it is called course management system; managed learning environment; virtual learning environment; Web-based

learning environment and learning platform, and e-learning system. Recently, the term “learning platform” has become more commonly known than LMS. Typically, learning platforms act as a resource repertoire and usually have three areas, namely, content area, communication area, and administrative area.

Learning platforms help educators and administrators manage learning resources, promote interactions among learners and between learners and educators, and enable teachers or administrators to track and report learning outcomes. There are a number of learning platforms in the market, but the most popular ones are WebCT (<http://www.Webct.com/>), Blackboard (<http://www.blackboard.com/us/index.aspx>), and TopClass (<http://www.wbtsystems.com/>). Apart from those commercially developed learning platforms, there are also a number of free-learning platforms available which are usually sponsored by governments and large organizations. Moodle (<http://moodle.org/>) is perhaps one of the rare free open source software packages that allows individuals to modify it for their use.

## BACKGROUND

Learning platforms are widely used as learning portals to allow students to learn at any time and any place as long as there is an available Internet connection and a standard Web browser (Boggs & Shore, 2004; Freeman, 1997; Palloff & Pratt, 2001). They can use the online platform to participate easily in discussion forums and access teaching materials and related Web sites online. Many research studies suggest studying partially online enhances learning. The benefits include improving the quality of learning (Alexander, 2001), learners' levels of involvement, and incentive to learn can be increased significantly with a wider and more complete understanding of the subject knowledge (Eleuterio & Bortolozzi, 2004); to be able to discuss in greater depth; the enhancement of critical thinking

skills (Tan, Turgeon, & Jonassen, 2001); and to foster active and independent learning (Rosenberg, 2001). However, Alavi and Lediner (2001) did not find any conclusive evidence after reviewing pertinent literature and suggested that better understanding of the role of technology is needed.

### **Functionalities of Learning Platforms**

The components of learning platforms usually include templates for content pages, discussion forums, chat, quizzes, closed-end exercises, and control panels. Most course instructors put teaching materials on the content pages as it provides a central area for storing teaching materials systematically. The materials can be Microsoft PowerPoint or other acceptable formats. However, the discussion forum can be considered the most important function of a learning platform as it facilitates discussion. All learners have full control of the duration and time to discuss whatever and whenever they feel like it. The opportunity to participate is invaluable to learners as it is usually impossible for everyone to participate in discussion during class time, especially with larger classes.

Learners are prompted to think deeply and are more reflective when posting their messages online. This is

because the postings are there for everyone to read so that they have to be mindful of their own opinion. Research has also found that learners consistently rate communication and support from educators and learners as being a major influence on their learning (Fredericksen, Pickett, & Shea, 2000; Sims, 2003). In fact, a discussion forum is more than just a place for communication; it also serves as a record of participation. However, incentives are needed to motivate full participation. The main welcoming incentive appears to be giving marks for online discussion. Other incentives include giving encouraging feedback and some forms of tangible reward such as giving chocolates for good quality discussion and/or frequent discussants. Ideas and examples of what to put in a learning platform are shown in Table 1.

### **Limitations of Learning Platforms**

Although a learning platform can assist educators in systematically creating and managing their teaching material, many popular Web-based learning platforms have limitations such as the lack of facilities for the reuse of teaching material. Indeed, the educator has to upload the same file twice if she uses the same teaching material for two different modules, even for the same

*Table 1. Examples of resources of a learning platform (Blackboard)*

<b>Function</b>	<b>Example</b>
Announcements	General announcements such as change of teaching venue and cancellation of classes
Course information	Module syllabus
Course material	PowerPoint files Word files Short video clips
Assignments	Assignment requirements and submission deadline Marking scheme Assessment rubrics
Discussion forum	Open discussion according to the topics related to the module content. Intergroup discussion on the topics chosen, facilitated by different groups. For submitting assignments as a form of formative assessment so that comments from peers and educators can be collected and recorded.
Groups	To share private exchange of files, information, and communication within the group members (particularly appropriate for group projects). Formative assessment among group members such as draft of the group's work and reflection on what they have learned from the module. Informal information exchange among group members.

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