



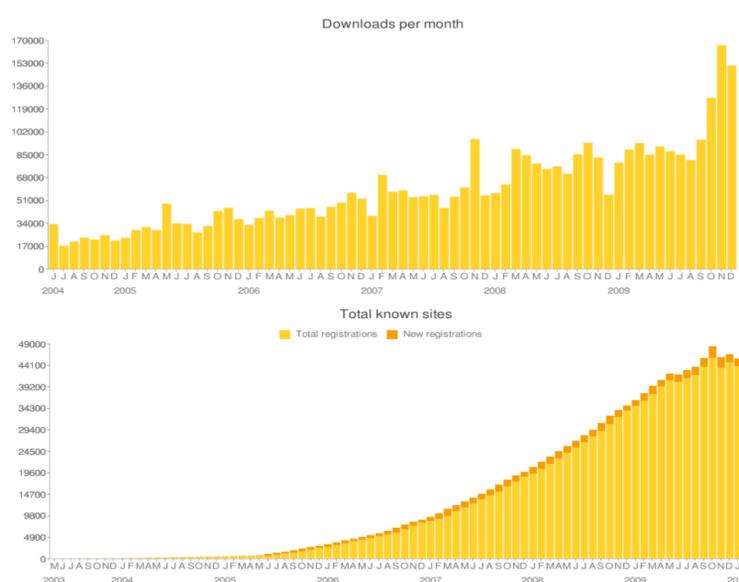
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Abstract:

Every day, students login to use Cabrini's WebCT and Blackboard systems. These systems are a vital part of the modern learning environment. They allow students and teachers to interact inside and out of the classroom. Unfortunately, students are limited with these technologies to the features available, and the features that the faculty chooses to utilize. The current way in which most faculty members use the available technologies facilitates a one-way work flow, like when the student uploads a paper to be graded. There are systems such as Moodle that combine the power and accessibility of cloud computing with the growing open-source community. Moodle enhances the interaction outside of the classroom, but also changes the way we think about learning inside the classroom.

Background:

Moodle is a tool for schools, teachers, and educators to collaborate inside and outside of the classroom. The system was designed with a modular structure, allowing each version of the product to be customized to suit the user or organization's needs. By reifying basic educational functions into modules, it creates a dynamic learning environment unique to each implementation of the system. (6) The software was developed out of a need to create a better user experience for students and teachers. (2) The creator of the system, Martin Dougiamas, was unsatisfied by the services provided by WebCT and Blackboard and decided to rebuild the package from the ground up from a new perspective.



<http://moodle.org/stats>

"I encountered many frustrations with the WebCT beast and developed an itch that needed scratching - there had to be a better way (no, not Blackboard)"

-Martin Dougiamas – creator (2)

"Moodle is a software package for producing Internet-based courses and web sites. It is a global development project designed to support a social constructionist framework of education."

http://docs.moodle.org/en/About_Moodle

Modular Object- Oriented Dynamic Learning Environment

Community:

Moodle is backed by an open-source community of developers and users. (1) The "open and free" ideology states that the software should be distributed freely under the requirements of a GNU General Public License and also modified by anyone with ideas and a knowledge of open-source software development. (8)



Cloud Computing:

Thanks to recent breakthroughs in cloud computing, in addition to the open-source development process, the software suite can be integrated with many other open systems such as Google Accounts, and OpenID. (3) In the future, Google plans on expanding their Google App service to include educational systems for support, collaboration, and communication. (4) For now, Google's account system can be implemented to extend their "single login" system to your specific build of Moodle. By distributing the data for the user and the system into the cloud it reduces the workload of the administrators of the system as well as the costs.

Technical Requirements:

Moodle can be deployed on any Macintosh, Windows, or Linux PC that supports PHP. PHP is the middleware language written to provide the logical bridge between the data of the system and the user interface. Moodle's datastore can be set up with any database model that incorporates SQL. If you do not have access to hosting for the system, Moodle's commercial branch provides a comprehensive hosting and support package.

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Benefits & Features:

The backbone of the Moodle experience is the social constructivist pedagogy. (6) Social constructivism in the pedagogical context promotes student-teacher, student-student collaboration, interactive activities to fuel learning, and critical reflections on the tasks and challenges presented in the learning environment. (7) Moodle was built to be as intuitive as possible for the user, and also the developer whom wishes to expand on the system. The package is scalable, and able to be implemented by any sized community from a small learning collective all the way up to a full sized university with attendance into the tens of thousands, without losing performance.

Discussion/Conclusions:

Using Moodle would be a great alternative to existing systems such as WebCT, and Blackboard. Not only is the user experience conducive of a better learning environment, but the actual cost to run the system is close to nothing for small to mid-sized groups, and relatively fractional for enterprise-scale organizations. Moodle opens up many doors to enhance the learning experience for a student, and also allows the teacher to present a new, interesting learning style.

Addendum:

Moodle's presence in the mainstream market can be seen with a plug-in developed by Microsoft which allows you to integrate your Moodle file system directly into various Microsoft Office products. Documents can be opened and saved from the file system to be edited on the fly. (5)

Moodle has provided a completely working demo of their system at : <http://demo.moodle.net>

References:

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7. Social Constructivism Theories - <http://viking.coe.uh.edu/~ichen/ebook/et-it/social.htm>
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