

***If you are an educator or business trainer, you have probably heard all the talk about.....***

## **21<sup>st</sup> Century Schools**



## **Social Software and e-Learning**



***When the buzz dies down and it's time to do something for your organization, what do you want from an online learning system?***

- Easy creation of courses from existing resources?
- Course content which can be re-used with different learners, including content from other vendors (Blackboard, WebCT etc.)?
- Learner involvement?
- Enrollment and learner authentication which is simple yet secure?
- Intuitive online learner and teacher management features?
- An active support community to help solve problems and generate new ideas?
- Affordability?





## ***Introducing..... Moodle!***

Moodle is an alternative to proprietary commercial online learning solutions, and is distributed *free* under open source licensing. An organization has complete access to the source code and can make changes if needed. Moodle's modular design makes it easy to create new courses, adding content that will engage learners.

modular object-oriented dynamic  
learning environment



*Moodle's intuitive interface makes it easy for instructors to create courses. Students require only basic browser skills to begin learning.*

## ***Moodle Architecture***

**Activities** are at the heart of a course management system. Moodle was designed by an educator and computer scientist, with “social constructionist” principles in mind. “Constructionism asserts that learning is particularly effective when constructing something for others to experience. This can be anything from a spoken sentence or an internet posting, to more complex artifacts like a painting, a house or a software package.

The concept of *social constructivism* extends the above ideas into a social group constructing things for one another, collaboratively creating a small culture of shared artifacts with shared meanings. When one is immersed within a culture like this, one is learning all the time about how to be a part of that culture, on many levels.”



Martin Dougiamas  
Creator & Lead Developer

## ***Promoting Learner Involvement***

“A constructivist perspective views learners as actively engaged in making meaning, and teaching with that approach looks for what students can analyze, investigate, collaborate, share, build and generate based on what they already know, rather than what facts, skills, and processes they can parrot. Some of the tenets of constructivism in pedagogical terms include:”

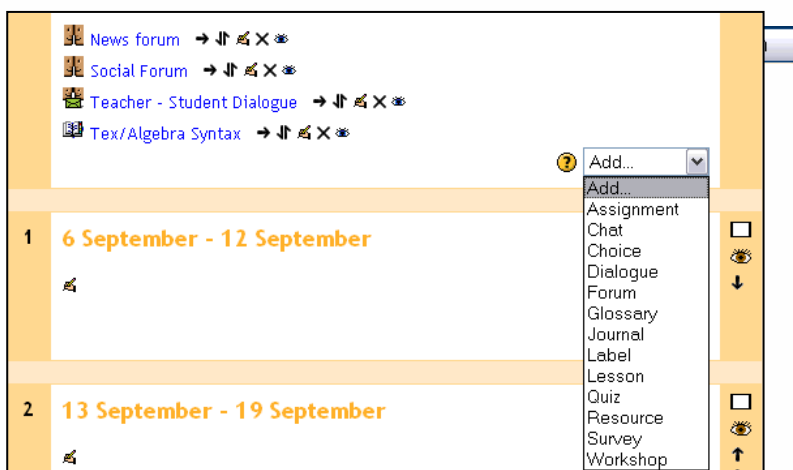
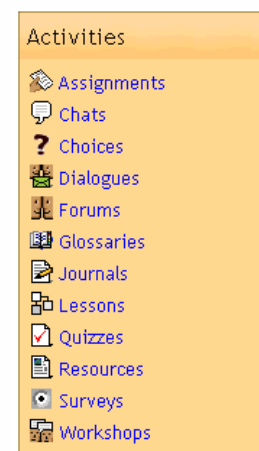


- Students come to class with an established world-view, formed by years of prior experience and learning.
- Even as it evolves, a student’s world-view filters all experiences and affects their interpretations of observations.
- For students to change their world-view requires work.
- Students learn from each other as well as the teacher.
- Students learn better by doing.
- Allowing and creating opportunities for all to have a voice promotes the construction of new ideas.

## Getting Started

Moodle has a “modular” design so adding the Activities that form a course is a simple process:

1. Course creation privileges are assigned to the teacher.
2. Select from one of three course layout; **Topic**, **Weekly** or **Social** format.
3. Click “Turn editing on” within the blank course template.
4. Create the course!



*With editing turned on, the course creator can now **Add** activities from an intuitive drop-down list of module plug-in features.*

## Course Management Features - Modules

### Assignment

Used to assign online or offline tasks; learners can submit tasks in any file format (e.g. MS Office, PDF, image, a/v etc.).

### Chat

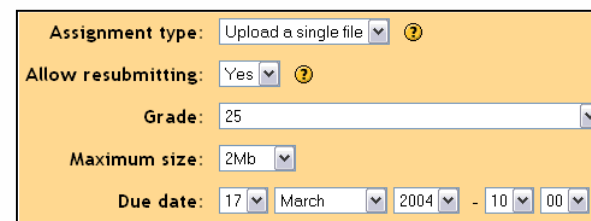
Allows real-time synchronous communication by learners.

### Choice

Instructors create a question and a number of choices for learners; results are posted for learners to view. Use this module to do quick surveys on subject matter.

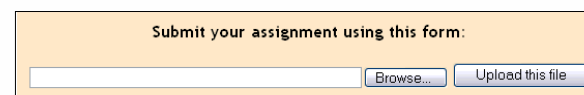
### Dialogue

Allows for one-to-one asynchronous message exchange between instructor and learner, or learner to learner.

A screenshot of the Moodle Assignment property screen. It contains several settings: "Assignment type" set to "Upload a single file" with a help icon; "Allow resubmitting" set to "Yes" with a help icon; "Grade" set to "25"; "Maximum size" set to "2Mb"; and "Due date" set to "17 March 2004" with time set to "10:00".

Assignment type: Upload a single file ?  
Allow resubmitting: Yes ?  
Grade: 25  
Maximum size: 2Mb  
Due date: 17 March 2004 - 10:00

*Property screens guide instructor through setup when creating a new Assignment*

A screenshot of the Moodle Assignment submission form. It features a text input field for the assignment name, followed by "Browse..." and "Upload this file" buttons.


Submit your assignment using this form:  
[Text Input] [Browse...] [Upload this file]

*Assignment activity can require the learner to upload a completed project.*

## Course Management Features - Modules

### Forums

Threaded discussion boards for asynchronous group exchange on shared subject matter. Participation in forums can be an integral part of the learning experience, helping students define and evolve their understanding of subject matter.

**Learner-Centered Psychological Principles**  
by [Anders Berggren](#) - Saturday, 15 November 2003, 07:16 PM

Hi,

I found this as published by the American Psychological Association. Maybe these principles can be of interest or help.


Learner-Centered Psychological Principles: A Framework for School Redesign and Reform

<http://www.apa.org/ed/lcp.html>

Cheers, Anders B

[Reply](#)

Rate...



*Students can Rate a forum post, based on Scales set up by the course creator*



## Course Management Features - Modules

### Glossary

Create a glossary of terms used in a course. Has display format options including entry list, encyclopedia, FAQ, dictionary style and more.

### Journal

Learners reflect, record and revise ideas.

### Label

Add descriptions with images in any area of the course homepage.

### Lesson

Allows instructor to create and manage a set of linked "Pages". Each page can end with a question. The student chooses one answer from a set of answers and either goes forward, backward or stays in the same place in the lesson.

Glossary module allows you to create a course specific dictionary of terms. Glossary terms can be searched or browsed by students, and teachers can import/export glossary listings. Whenever a glossary term is used in a course resource it will appear in the document in highlight, allowing the student to review its definition with a single mouse click.

Search   Search full text

[Add a new entry](#)
[Import entries](#)
[Export entries](#)
[Waiting approval](#)

[Browse by alphabet](#)
[Browse by category](#)
[Browse by date](#)
[Browse by Author](#)

Browse the glossary using this index

[Special](#) | [A](#) | [B](#) | [C](#) | [D](#) | [E](#) | [F](#) | [G](#) | [H](#) | [I](#) | [J](#) | [K](#) | [L](#) | [M](#) | [N](#) | [O](#)  
[P](#) | [Q](#) | [R](#) | [S](#) | [T](#) | [U](#) | [V](#) | [W](#) | [X](#) | [Y](#) | [Z](#) | [ALL](#)

**H**

highlight:

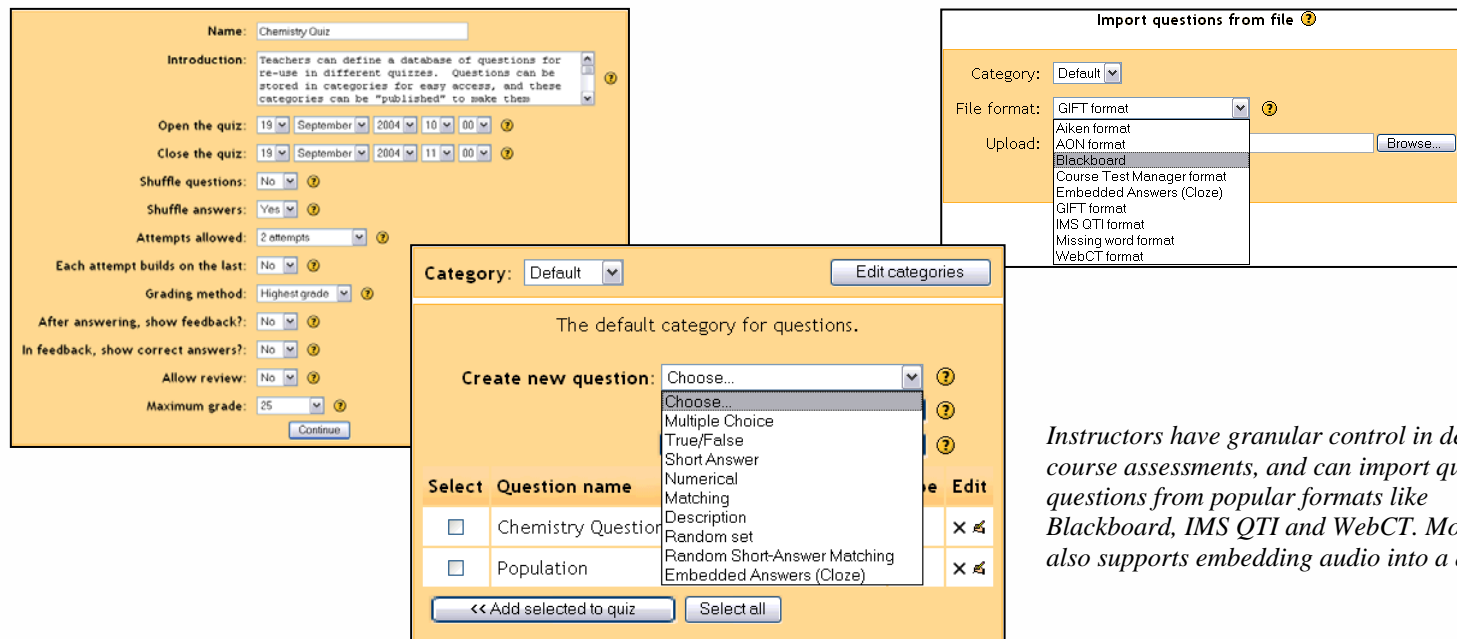
1. An area or a spot in a drawing, painting, or photograph that is strongly illuminated. 2. An especially significant or interesting detail or event. 2. a. To make prominent, emphasize. b. To be a highlight of. 3. To mark (important passages of text) with a usually fluorescent marker as a means of memory retention or for later reference. In Moodle, Glossary terms are highlighted in light grey.

*Glossary terms appear in highlight within all activity resources. Moodle includes its own site search engine.*

## Course Management Features - Modules

### Quiz

Create all the familiar forms of assessment including true-false, multiple choice, short answer, matching question, random questions, numerical questions, embedded answer questions with descriptive text and graphics.



The image displays three screenshots of Moodle's quiz management interface:

- Quiz Settings:** Shows configuration for a quiz named "Chemistry Quiz". It includes fields for introduction, open/close dates, shuffle options, attempts, grading method, and feedback options.
- Import questions from file:** Shows a dropdown menu for file formats including GIFT, Aiken, AON, Blackboard, Course Test Manager, Embedded Answers (Cloze), IMS QTI, Missing word, and WebCT.
- Create new question:** Shows a dropdown menu for question types (Multiple Choice, True/False, Short Answer, Numerical, Matching, Description, Random set, Random Short-Answer Matching, Embedded Answers (Cloze)) and a table of existing questions.

Select	Question name	Delete	Edit
<input type="checkbox"/>	Chemistry Question	✕	✎
<input type="checkbox"/>	Population	✕	✎

*Instructors have granular control in defining course assessments, and can import quiz questions from popular formats like Blackboard, IMS QTI and WebCT. Moodle also supports embedding audio into a quiz.*

## Course Management Features - Modules

### Resource

The primary tool for bringing content into a course; may be plain text, uploaded files, links to the web, Wiki or Rich Text (Moodle has built-in text editors) or a bibliography type reference.

### Survey

This module aids an instructor in making online classes more effective by offering a variety of surveys (COLLES, ATTLS), including critical incident sampling.

### Workshop

An activity for peer assessment of documents (Word, PP etc.) that students submit online. Participants can assess each other's project. Teacher makes final student assessment, and can control opening and closing periods.

fraction:

- Syntax:  $\frac{\text{numerator}}{\text{denominator}}$
- Use font sizing commands for specific sizing if you don't want the predefined one to be taken.
- Ex. (with predefined sizing):  $f(x,y)=\frac{2a}{x+y}$  gives

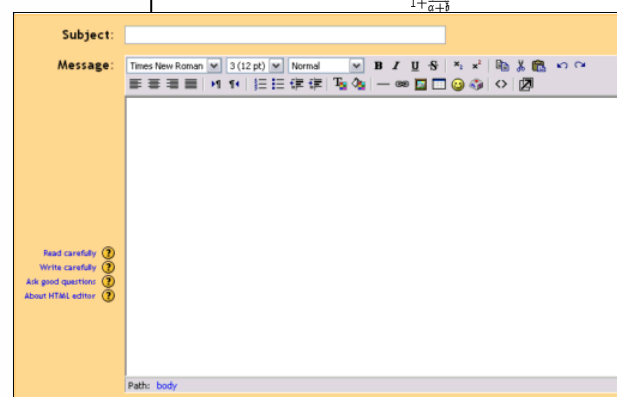
$$f(x,y)=\frac{2a}{x+y}$$

- Ex. (with specific sizing):  $f(x,y)=\frac{2a}{x+y}$  gives

$$f(x,y)=\frac{2a}{x+y}$$

- You may nest fractions as much as you want.
- Ex. (nested fractions):  $\frac{a}{1+\frac{a-b}{a+b}}$  gives

$$\frac{\frac{a}{x-y} + \frac{b}{x+y}}{1 + \frac{a-b}{a+b}}$$

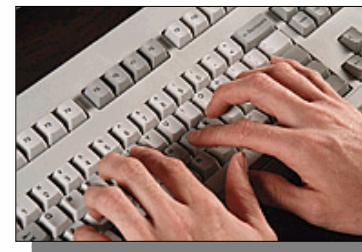


Moodle supports adding math expressions to a Resource activity, using the built-in HTML editor

## ***Learner Management Features***

Creating learning content is only part of what a good course management system (CMS) must do. The CMS must *manage* learners in a variety of ways. Learner management includes:



- Access to information about learners in a course.
- Ability to segment participants into groups.
- Site, course and user calendar event scheduling.
- And so much more...e.g. applying scales to different learner activities, managing grades, tracking user access logs and uploading external files for use within the course etc.




## Learner Management Features - Participants

One click and you can view activity from all participants enrolled in the course. Learners create a personal profile that can include a picture, helping connect students socially in the online learning community.

People

-  [Participants](#)
-  [Groups](#)
-  [Edit profile](#)


**Teachers**



**Mark Burnet**  
 Email address: [markburnet@earthlink.net](mailto:markburnet@earthlink.net)  
 Location: Providence Forge, VA, United States of America  
 Last access: Never


[Activity](#)  
[Full profile...](#)

**8 Students**




**Daniel Miksik**  
 Email address: [miksik@phil.muni.cz](mailto:miksik@phil.muni.cz)  
 Location: Brno, Czech Republic  
 Last access: Wednesday, 17 March 2004, 12:14 PM. (4 hours 21 mins)

[Activity](#)  
[Userrol](#)  
[Login as](#)  
[Full profile...](#)



**Diane Yeager**  
 Email address: [dmyeager@cbcglobal.net](mailto:dmyeager@cbcglobal.net)  
 Location: Willoughby, United States of America  
 Last access: Friday, 12 March 2004, 08:52 PM. (4 days 19 hours)

[Activity](#)  
[Userrol](#)  
[Login as](#)  
[Full profile...](#)



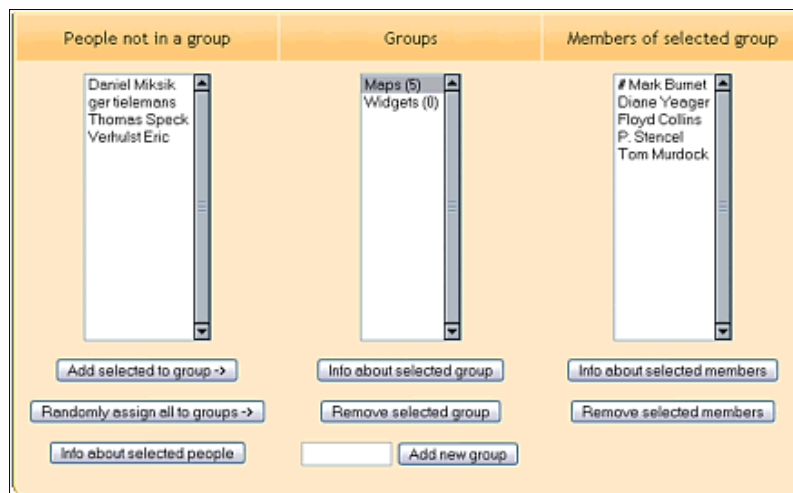
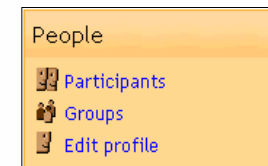
**Floyd Collins**  
 Email address: [floyd@gsoho.com](mailto:floyd@gsoho.com)  
 Location: Fremont, United States of America  
 Last access: Wednesday, 10 March 2004, 01:09 PM. (7 days 3 hours)

[Activity](#)  
[Userrol](#)  
[Login as](#)  
[Full profile...](#)

*Learners complete a personal profile page that helps build the online learning community. Adding a picture and details to the profile creates a social connection.*

## Learner Management Features - Groups

Assigning learners to a group is a common practice in education and business. Moodle allows the course instructor to easily create group categories, and determine how members will interact with each other and within various activities.



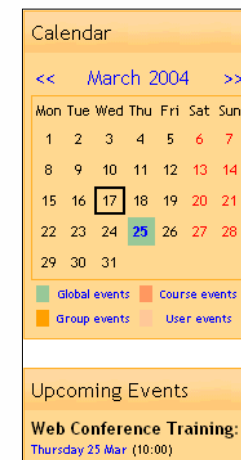
*Creating distinct group names is easy. Learners and teachers are assigned to a group by clicking a single button.*

## Learner Management Features - Calendar

Keeping a calendar of events is important to both the learner and course instructor. Events can be created for different categories, including:

- Global events that appear in all courses (system admin).
- Course events set by an instructor.
- Group events set by instructor relative only to a group.
- User events set by learner (e.g. due dates, personal etc.).

Upcoming Events appear on the course homepage, alerting the learner across all courses they are enrolled in of different category events. Alerts are color-coded by category.



## Learner Management Features - Admin

The Administration control panel puts all important learner management functions a single click away. Teachers and Students can be manually enrolled or removed from a course. Configuration of course Backup and Restore is achieved on a single screen.

Include Assignments:	Yes	with user data
Include Chats:	Yes	with user data
Include Choices:	Yes	with user data
Include Forums:	Yes	with user data
Include Glossaries:	Yes	with user data
Include Journals:	Yes	with user data
Include Labels:	Yes	with user data
Include Lessons:	Yes	with user data
Include Quizzes:	Yes	with user data
Include Resources:	Yes	with user data
Include Surveys:	Yes	with user data
Include Workshops:	Yes	with user data
Include Dialogues:	Yes	with user data
Users:	Course	
Logs:	No	
User Files:	Yes	
Course files:	Yes	

Administration

- Turn editing off
- Settings...
- Teachers...
- Students...
- Backup...
- Restore...
- Scales...
- Grades...
- Logs...
- Files...
- Help...
- Teacher forum

Name	Size	Modified	Action
<input type="checkbox"/> backup-ldemo.zip	1.1Mb	7 Mar 2004, 09:08 AM	<a href="#">Unzip</a> <a href="#">List</a> <a href="#">Restore</a> <a href="#">Rename</a>
<input type="checkbox"/> backup-lmdemo.zip	1.1Mb	8 Mar 2004, 03:49 PM	<a href="#">Unzip</a> <a href="#">List</a> <a href="#">Restore</a> <a href="#">Rename</a>

With chosen files...

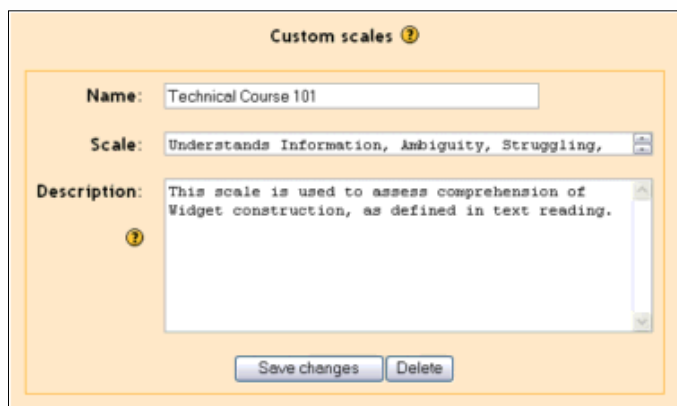
*Restoring an existing course or Uploading a file archive from storage is accomplished with a single mouse click. Moodle makes it easy to re-use and share courses with other teachers. Backup can include or exclude student files and course data.*



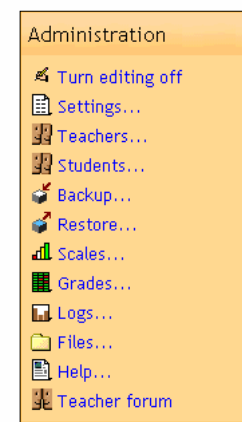
## Learner Management Features - Scales

Instructors may define custom Scales to be used for grading Forums, Assignments and Journals. Standard scales include assigning a value from 1-100% for each submission (or no grade), and indicating whether the learner was demonstrating one of three characteristics in the activity:

- Shows mostly CONNECTED knowing.
- Shows mostly SEPARATE knowing.
- Equally separate and connected.











*Custom scales allow the instructor to fine tune their grading for specific content. Easily create several types of scales, and connect them with different activities you **Add** to the course.*















## Learner Management Features - Grades

The Grades feature in Moodle provides a quick view of all Forum, Assignment, Journal, Quiz, Lesson and Workshop grades. The grading scale applied to a learner's submission is shown, along with a cumulative total, on a single page.

Grades									
Given name	Surname	News forum	Assignment #1: PowerPoint example	Journal Module	Lesson example	Quiz example with audio	Workshop example	Total	
		Max: 15	Max: 10	Max: 5	Max: 5				
	Floyd Collins							0	
	Verhulst Eric							0	
	Daniel Miksik							0	
	Tom Murdock							0	
	Cyrus Overman	Shows mostly SEPARATE knowing 1/0/0	15	5		5		25	
	P. Stencil							0	
	ger tielemans							0	
	Diane Yeager							0	

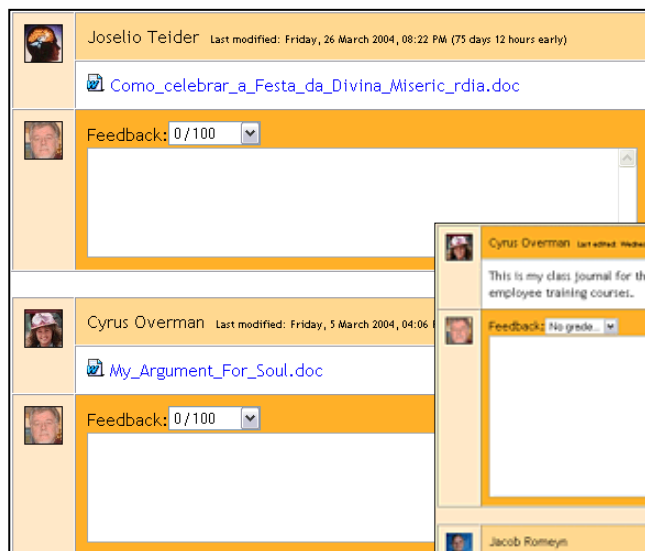
Administration

-  [Turn editing off](#)
-  [Settings...](#)
-  [Teachers...](#)
-  [Students...](#)
-  [Backup...](#)
-  [Restore...](#)
-  [Scales...](#)
-  [Grades...](#)
-  [Logs...](#)
-  [Files...](#)
-  [Help...](#)
-  [Teacher forum](#)

*Grades can be downloaded in Excel or plain text for inclusion into an existing electronic gradebook*

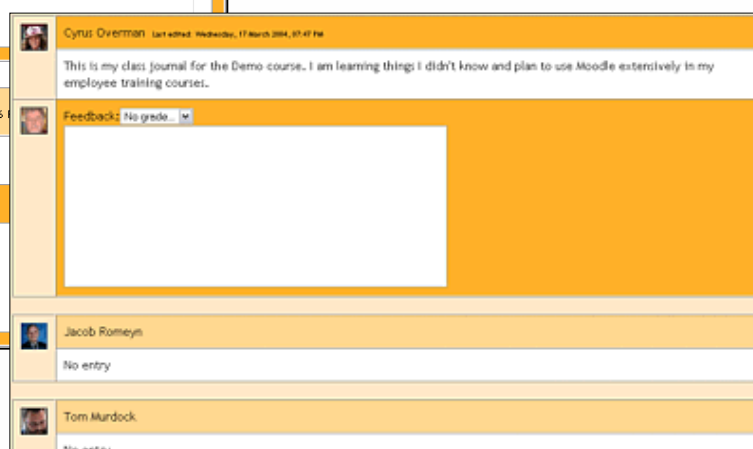
## Learner Management Features - Grades

Viewing Assignment and Journal submissions, and adding Grades and comments, are done from a single page that displays all enrolled students.



Joselio Teider Last modified: Friday, 26 March 2004, 08:22 PM (75 days 12 hours early)  
 Como\_celebrar\_a\_Festa\_da\_Divina\_Miseric\_rdia.doc  
 Feedback: 0 / 100

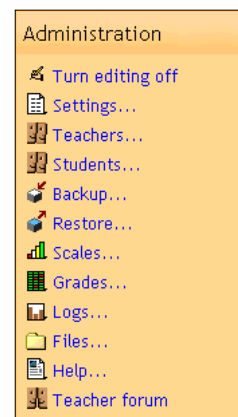
*Managing student submissions are done from one central screen. This cuts down on the time it takes to assess many students work.*



Cyrus Overman Last edited: Wednesday, 17 March 2004, 07:47 PM  
 This is my class journal for the Demo course. I am learning things I didn't know and plan to use Moodle extensively in my employee training courses.  
 Feedback: No grade

Jacob Romeyn  
 No entry

Tom Murdock  
 No entry



- Administration
- Turn editing off
- Settings...
- Teachers...
- Students...
- Backup...
- Restore...
- Scales...
- Grades...
- Logs...
- Files...
- Help...
- Teacher forum

## Learner Management Features - Logs

Monitor when and what course resources the learner has accessed. Moodle's Logs provide detailed learner activity.

Choose which logs you want to see:

Mathematics ▾ All participants ▾ Today, 19 March 2004 ▾ All activities ▾

Teacher Demo: Cyrus Overman, Friday, 19 March 2004 (server time)

Teacher Demo ▾ Cyrus Overman ▾ Today, 19 March 2004 ▾ All activities ▾

Displaying 28 records

Fri 19 March 2004, 09:54 AM	65.143.168.27	Cyrus Overman	assignment view	Assignment #1: PowerPoint example
Fri 19 March 2004, 09:53 AM	65.143.168.27	Cyrus Overman	course view	Teacher Demo
Fri 19 March 2004, 09:53 AM	65.143.168.27	Cyrus Overman	chat view	Course Chat
Fri 19 March 2004, 09:53 AM	65.143.168.27	Cyrus Overman	course view	Teacher Demo
Fri 19 March 2004, 09:53 AM	65.143.168.27	Cyrus Overman	dialogue view	Dialogue example
Fri 19 March 2004, 09:53 AM	65.143.168.27	Cyrus Overman	dialogue open	3
Fri 19 March 2004, 09:53 AM	65.143.168.27	Cyrus Overman	dialogue add entry	1
Fri 19 March 2004, 09:52 AM	65.143.168.27	Cyrus Overman	dialogue view	Dialogue example
Fri 19 March 2004, 09:51 AM	65.143.168.27	Cyrus Overman	course view	Teacher Demo
Fri 19 March 2004, 09:51 AM	65.143.168.27	Cyrus Overman	forum view forum	News forum

Logs pin-point where a student is within coursework. Easily locate specific course, student, date and module activity access.

- Administration
- Turn editing off
- Settings...
- Teachers...
- Students...
- Backup...
- Restore...
- Scales...
- Grades...
- Logs...
- Files...
- Help...
- Teacher forum

## Learner Management Features - Files

Centrally locate all course resources within the Files area of Moodle so they are available when creating new activities.

	Name	Size	Modified	Action
<input type="checkbox"/>	Graphics	-	12 Mar 2004, 10:45 AM	Rename
<input type="checkbox"/>	backupdata	-	12 Mar 2004, 12:15 PM	Rename
<input type="checkbox"/>	moddata	-	8 Mar 2004, 04:28 PM	Rename
<input type="checkbox"/>	VW-9_Form.pdf	42.2Kb	8 Mar 2004, 04:27 PM	Rename
<input type="checkbox"/>	argonline.swf	260.8Kb	8 Mar 2004, 04:27 PM	Rename
<input type="checkbox"/>	mug.jpg	6.7Kb	8 Mar 2004, 04:27 PM	Rename
<input type="checkbox"/>	presentation.mht	983.9Kb	8 Mar 2004, 04:27 PM	Rename
<input type="checkbox"/>	question2.mp3	209.6Kb	8 Mar 2004, 04:27 PM	Rename
<input type="checkbox"/>	toptopic.htm	8.6Kb	17 Mar 2004, 11:46 AM	Edit Rename
<input type="checkbox"/>	writing.htm	732 bytes	8 Mar 2004, 04:27 PM	Edit Rename

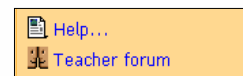
With chosen files...

Administration
Turn editing off
Settings...
Teachers...
Students...
Backup...
Restore...
Scales...
Grades...
Logs...
Files...
Help...
Teacher forum

*Files storage area resembles your computer, making it easy to add, move, zip and delete resources.*

## ***Learner Management Features - Help***

An extensive Moodle Help file is a button click away. Courses include a Teacher only forum, where colleagues can collaborate on tasks and share ideas.



### **Teacher Manual**

This page is a very quick guide to creating online courses with Moodle. It outlines the main functions that are available, as well as some of the main decisions you'll need to make.

Sections in this document:

1. [Getting started](#)
2. [Course settings](#)
3. [Uploading files](#)
4. [Setting up activities](#)
5. [Running the course](#)
6. [Further information](#)

### **Getting started**

This document assumes your site administrator has set up Moodle and given you new, blank course to start with. It also assumes you have logged in to your course using your teacher account.

*Moodle's built in Teacher Manual provides step-by-step instructions on all aspects of course and learner management*

## Learner Experience - Login

Learners find it easy to navigate a Moodle course homepage in their browser; intuitive “breadcrumb” links are always present. Login occurs on a familiar screen. Initial account set up may be handled by the learner or administrator.



Returning to this web site?	Is this your first time here?
<p>Login here using your username and password: (Cookies must be enabled in your browser) ⓘ</p> <p>Username: <input type="text" value="hiplndrifter"/> <input type="button" value="Login"/></p> <p>Password: <input type="password" value="*****"/> <input type="button" value="Login"/></p> <hr/> <p>Some courses may allow guest access:</p> <p><input type="button" value="Login as a guest"/></p> <hr/> <p>Forgotten your username or password?</p> <p><input type="button" value="Send my details via email"/></p>	<p>Hi! For full access to courses you'll need to take a minute to create a new account for yourself on this web site. Each of the individual courses may also have a one-time "enrollment key", which you won't need until later. Here are the steps:</p> <ol style="list-style-type: none"> <li>1. Fill out the <a href="#">New Account</a> form with your details.</li> <li>2. An email will be immediately sent to your email address.</li> <li>3. Read your email, and click on the web link it contains.</li> <li>4. Your account will be confirmed and you will be logged in.</li> <li>5. Now, select the course you want to participate in.</li> <li>6. If you are prompted for a "enrollment key" - use the one that your teacher has given you. This will "enroll" you in the course.</li> <li>7. You can now access the full course. From now on you will only need to enter your personal username and password (in the form on this page) to log in and access any course you have enrolled in.</li> </ol> <p><input type="button" value="Start now by creating a new account!"/></p>

[Home](#) -> [Math](#) -> [Forums](#) -> [News forum](#)

*Navigation bar provides breadcrumb links from course homepage to activities*

*Moodle's has its own authentication system, but will integrate with an external database, POP3, IMAP, LDAP or NNTP, allowing domain wide login.*

## Learner Experience - Enrollment Keys



Instructors can require an “enrollment key” to allow participation in a class. Enrollment keys are provided to learners separately from the log in process. Courses requiring an enrollment key are indicated in “Course categories” description.

My courses


-  [Language Arts](#)
-  [Mathematics](#)
-  [Music and Fine Arts](#)
-  [Physical Sciences](#)
-  [Social Sciences](#)
- [All courses...](#)

**Physical Sciences**

Teacher: [Mark Burnet](#)  
 Teacher: [Timothy Allen](#)  
 Teacher: [Bryan Williams](#)

A blank "Topic format" course template for creating physical science courses. Use this course to explore Moodle features and create activities for any physical science type and level of course.



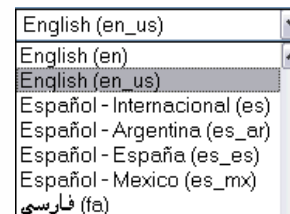
Physical science teachers participating in **Course Challenge** should get started here (site administrator can identify all entries). After Login registration, use "enrollment key" displayed in the Teacher Demo *News forum* post titled Course Challenge. Once registered, you will be able to enter all courses at Main Street VLE Campus. This will give you ideas on how others are using Moodle to create courseware.

*Course category displays descriptions of each course. Symbols on description page indicate when a course requires an enrollment key and allows Guest entry. Students see a list of courses they are enrolled in (My courses) on site homepage after login.*



## ***Learner Experience - 24/7/365 Anywhere!***

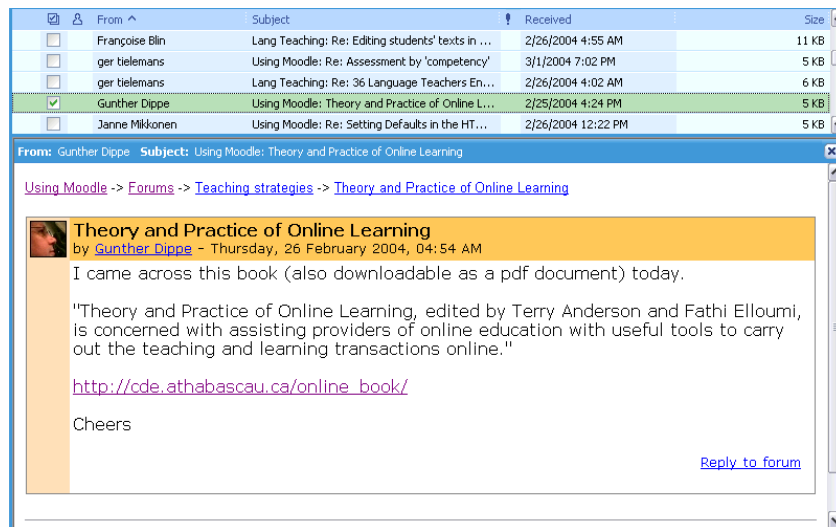
Learners can login *any time, anywhere* to interact with coursework, and can specify the Time Zone and Language they wish to use. Moodle has interface support for 34 languages.



*Learners can select from 34 languages at Login*

## Learner Experience - E-Mail Notification

When learners “subscribe” to forums they are notified by e-mail of new postings. Additionally, instructors can set e-mail notification for private Dialogues.



*Rich text e-mail is sent to each learner “subscribed” to different Forums. Instructors can set private Dialogues to e-mail notification that comments have been added.*

## ***Who is Using Moodle?***

Over 1150 organizations in 81 countries had registered Moodle sites by April 2004 (<http://moodle.org/sites>). This number is growing by about 10% each month as educators and trainers learn the value of implementing open source Moodle.

Moodle is an ideal online learning solution for:

- K-12 Schools
- Colleges
- Universities
- Governmental Agencies
- Businesses
- Trade Associations
- Hospitals
- Libraries
- Employment Agencies

"My first live class just ended and it was a tremendous success, both in the behavior of the program and the quality and longevity of my participants. Moodle has been terrific to work with. Somehow it doesn't seem to be as tedious to work with as other courseware programs such as Blackboard and WebCT."

- Paula Edmiston, Trainer

