

Extending Moodle

A guide to integrating free and open source
web resources with the Moodle VLE



Introduction

This resource is designed as part of a series that have been produced by the VLEs4VET project, funded with support from the European Commission under the Lifelong Learning Programme.

The VLEs4VET project aimed to transfer positive experience and knowledge in the use of Virtual Learning Environments by European learning organisations into the Vocational Education and Training sector in Dublin, Eire.

As a result of this project City of Dublin Vocational Education Committee implemented an organisational-wide VLE using Moodle. This resource is one in a series of teacher CPD resources that was produced to support this implementation.

You may find it useful to access some of the other CPD materials produced in this series;

- **Basic ICT for VLEs:** An introduction to basic ICT for teaching staff working with new VLEs
- **What is a VLE?** An overview of the VLE system and explanation of commonly used terminology and abbreviations
- **Benefits of a VLE:** What does a VLE offer to teachers and students, both inside and outside the classroom?
- **Initial lessons in using a VLE:** Hands-on training booklet for teachers.

- **20 quick wins:** 20 straightforward ways to start using a VLE to enhance your teaching and learning
- **Moodle: A teacher's guide.** A guide to the Moodle VLE for teachers and class administrators
- **20 quick wins with Moodle:** 20 great ideas for teachers using the Moodle VLE

All of these resources, and more, can be found on the project website at www.vles4vet.eu





Extending Moodle

Moodle is an amazing tool. Free and Open Source at the core it has been designed, constructed and constantly improved by a community of dedicated coders and educators. Within the Moodle system you will find a wealth of tools that will extend your teaching practices, involve your students and promote collaboration, discussion, teamwork, engagement and more.

However, there are also a vast and growing number of free and paid online web 2.0 tools and resources that can be used as part of your teaching repertoire - and these should not be ignored simply because you and your organisation have elected to use the Moodle VLE system.

The good news is, they don't need to be! Moodle welcomes the integration of third-party tools into its system. With a little work you should be able to integrate your favourite online tools into your system with few problems.

This resource will supply a few suggested tools and demonstrate how they can be used. It cannot have the scope to cover all of the tools available through the Internet today, and if it did it would be out of date tomorrow as new ones are constantly being developed. However, we hope that through these suggestions you will feel confident enough

to go out and experiment for yourself. It is good to remember that ... "you are not alone"! There are thousands of educators just like you doing the same things with Moodle across the world, if you run into problems, ask them for help. Or, help others with news of your own Moodle usage - go to www.moodle.org to share with the Moodle community.

Using Plugins

Many of the extensions to Moodle that are talked about in the coming pages are available from the "plugins" directory on www.moodle.org. This is a fantastic resource for both the novice and the advanced Moodle user. The Plugins directory contains hundreds of pre-configured extensions to the standard Moodle setup - and each extension has links to documentation, discussions, source code and downloads of the plugin itself, usually with full installation instructions. Simply go to www.moodle.org/plugins and browse the available extensions - and let your imagination and creativity do the rest!

The authors would, at this point, like to thank and acknowledge both the Moodle creators and the community of developers, teachers and enthusiasts on www.moodle.org for much of the work behind this resource.

E-Portfolio: Mahara

Mahara is another open source software, developed by Kineo Pacific and many others. This is a hugely popular extension to Moodle although it can also be run as a stand alone system.

Mahara enables students (or teachers) to create an online, media-rich, portfolio of work and experiences. You do this by collecting and collating files, journals, links and media assets into a web page - which you can then share with selected people both inside and outside your network.

Features of Mahara

- Manages, stores and displays media-rich content
- Users have the ability to select who can see each piece of information and in what format
- Can be used as a showcase/cv
- Contains a flexible resume builder
- Links with social networking sites to share content (e.g. Facebook)
- Contains group collaboration tools
- Can import and export data using open standards

E-Portfolios can be customised and personalised into a one-stop-shop to demonstrate skills and experiences of individual students to teachers, peers and employers. They are an increasingly popular tool and Mahara is amongst the most developed and full featured.

While Mahara is actually a fully featured, stand alone, piece of software, it has been designed and developed to integrate seamlessly with Moodle. Mahara provides a single sign-on capability that allows users, at the option of the administrator, to be automatically logged on to both their Mahara and their Moodle accounts through a single sign-on procedure.

Note: Mahara installation and integration will require some advanced administrative knowledge, and administrative access to the Moodle system - however, you can begin using it as a separate system if you do not have the prerequisite skills or permissions - and there are many companies that will be available to help you if you require a professional installation.



E-Portfolio: Exabis

Exabis is a simpler alternative to Mahara. Not so fully featured but perfectly usable, Exabis installs as a “block” in Moodle and provides e-portfolio features for each student. In essence, Exabis works the same as Mahara - students can build a portfolio of work through collecting and categorising weblinks, files and notes (including media-rich files). Again, Exabis can publish artefacts to specific target groups to get comments and assessments as well as import uploaded assignments from within Moodle itself. E-Portfolios can later be exported as SCORM packages - a standardised scheme and file format for the transportation of learning-based data. You can also use Exabis “competencies” to link teacher or organisation defined competencies with each artefact within the portfolio.

To install Exabis simply download the latest version from the Moodle plugin site - this will download as a zip file.

Unzip the contents to your local machine - it will create a folder called “exabis_eportfolio”.

Transfer the folder “exabis_eportfolio” to the “blocks” directory of your Moodle installation.

Log in as “administrator” and click the “Home” link.



Online classes: WizIQ

WizIQ is a Virtual Classroom delivery system that allows organisations/teachers to schedule and deliver online classes offering real-time, collaboration and communication via web conferencing. Classes can be recorded, archived and viewed again (great for revision and reflection) and WizIQ offers a very simple and intuitive user interface so that teachers can get up and running with it very quickly - and can remain focused on the class delivery, rather than the technology delivering it.

WizIQ does attract a cost however, there is a monthly fee dependent on how many users are viewing the classes - but you can get a 30-day free trial at www.wiziq.com - and the company states that it does not tie you into lengthy contracts but simply charges by the month.

WizIQ's Live Class module allows whiteboard, content and screen sharing - great for collaborative work - and also has facility for 4 live video streams. Included in the package are the standard video conferencing communication tools - private chat, group chat, raise hand, emoticons, font colours etc.

WizIQ installs as a module but also has a block plugin that shows scheduled online classes.

See the Moodle plugins listing for more information.

Online classes: BigBlueButton

BigBlueButton is another open source software designed to do video conferencing and virtual meetings. In fact, there have been several free tools on the web that have since disappeared (Dim-Dim) or been acquired (Elluminate) and BigBlueButton is one of the last free tools (more will be developed, we are sure).

BigBlueButton is available from the Moodle website as an activity module - which means you can plug it into your system and use it as a Moodle activity with your classes and groups, which is great.

BigBlueButton allows users to share webcams to an unlimited number (dependant on bandwidth available); it has integrated VoIP (voice over Internet protocol) so works with speakers and microphone; it has screen/desktop sharing and an integrated whiteboard - so this is a fully functioning web-conferencing suite.

To get BigBlueButton up and running you need to either be running the system on your own server (you will need technical support to set this up) or you can contact DualCode (the creators of the software) who run a paid hosting service.

To install the activity into Moodle simply download the plugin from www.moodle.org and follow the documentation that accompanies it.

Google Apps in Moodle

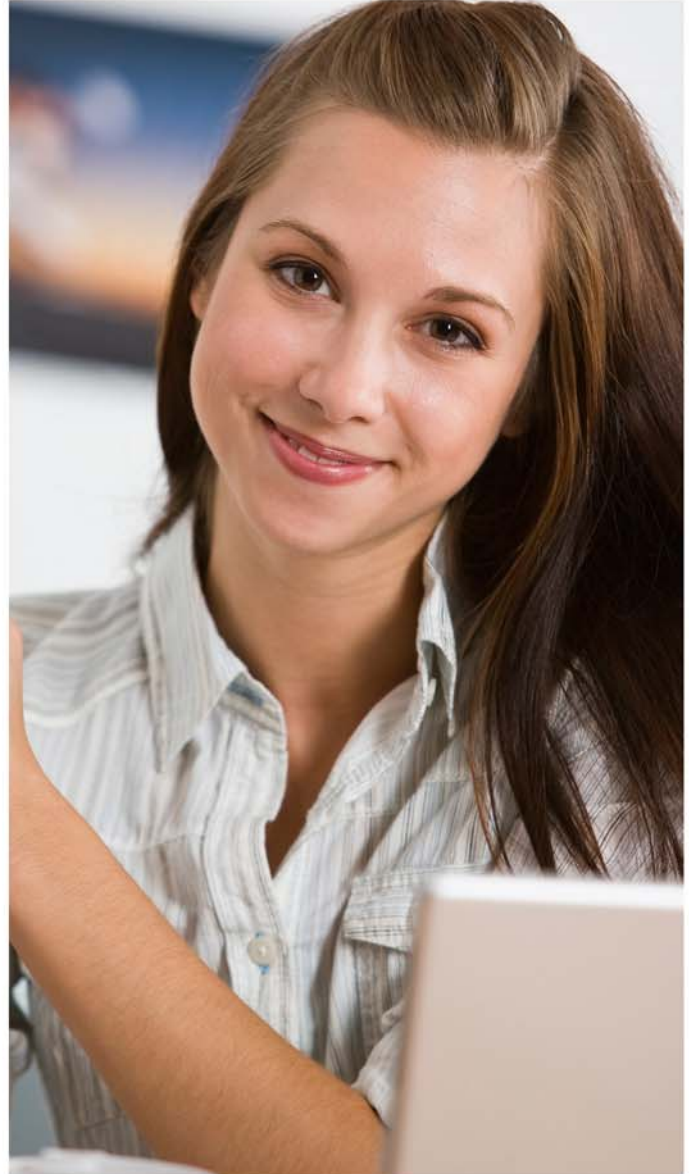
There's probably a lot of you out there who love Google Apps - and who can blame you? The Google suite of Apps for educational use is a fantastic, free resource that offers great interactivity and creativity both inside and outside the classroom - and now you can embed all of that directly into your Moodle VLE and use them together!

Done right, this can be one of the most powerful extenders of the Moodle system. Moodlerooms, a US eLearning company, collaborated with Google in building this plugin (available from www.moodle.org/plugins/directory) which fully integrates Google Apps on your Moodle VLE.

Some of the available features:

- Moodle users are automatically created in Google Apps (Google Docs, Calendar and Gmail)
- When users log in to Moodle they are automatically logged into Google Apps
- A Gmail block in Moodle displays your latest Gmail messages on the front page of Moodle
- Another block on the front page links directly to your Google start page, Google Docs, Google Calendar and Gmail
- From the Google end, a Google widget shows a link back to your Moodle

Setting up this module can be tricky! Ask your systems administrator for help.





Media: Lightbox Gallery resource

This resource allows teachers to create “Lightbox” enabled galleries within their Moodle courses. Basically, the lightbox system is a set of scripts that are used to apply engaging effects to image galleries.

Teachers are able to create, edit and remove galleries of images to their courses - illustrating the content or adding meaning to text. Images can be tagged (for searching and for connecting to learning) and are displayed as small thumbnails. When clicked on you get the full image view in a central screen position.

Images can be grouped through the tagging system and (this is the bits the students like) there are some really fancy transitions between pictures - to give them that really “modern” web feel.

This one is a snap to set up:

- Download the latest version from [www.moodle.org plugins directory](http://www.moodle.org/plugins/directory)
- Unzip to your local machine
- Upload the lightbox gallery folder to your /mod folder in Moodle
- Login as admin and visit the “notification” page - this will complete the installation.
- Use and enjoy.

Media: Flickr Image Carousel

Do you use Flickr? If not, you should. Flickr is a great, free web 2.0 resource; an image sharing, storing and tagging resource used by millions of people worldwide.

You can upload sets of images to Flickr, tag them by content, subject etc and then share these with the world - or with selected users.

Flickr Image Carousel creates a block within Moodle that contains a scrollable carousel of images from a single user's "photostream" on Flickr. It can work in three ways:

1. Display entire photostreams - starts randomly in the stream and shows up to 50 images
2. Display an entire photoset in sequence - great for storyboards, development over time etc. (how about creating a photoset that shows a year with 4 pictures per month in sequence?)
3. Display by tag - so only shows images with a specific tag attached e.g. a course ID.

All images link back to Flickr - where you may store more information on the image, or use other of Flickr's tagging and image map tools.

Installation, again, is simple. Just follow the instructions as per Lightbox Gallery but upload your files into the "blocks" folder.

Media: Multimovie

This is the first "filter" we've looked at in this resource. In Moodle, filters can be used to add links, insert multimedia players, convert Mathematical expressions etc. Filters can be enabled across a Moodle site - and then switched off for individual courses if you require.

The Multimovie filter allows a teacher to display inline videos within their Moodle courses - so videos can be pulled in from YouTube, Google, TeacherTube etc and displayed on the course page. We all recognise the power of a good quality video within a course - so now you can put one within your Moodle course.

Filters are simply small text scripts that can be uploaded to your Moodle installation.

To enable or disable filters - either sitewide or on specific courses - go to settings under Administration > Modules > Manage Filters.



Administrative: Crot Plagiarism Checker

So far, we've talked about tools that are good to use with your students - tools that extend your teaching repertoire and make the learning experience more engaging and collaborative.

This plugin is a little bit different - but may too be very valuable to teachers. The Crot Plagiarism Checker is designed to work with the plagiarism API in Moodle and aims to detect digital plagiarism.

The module checks students submitted documents against peers work from the same institution as well as text copied from the Internet and looks for similarities in the work.

The block is based on document fingerprinting technologies for pair document comparison and utilises the Bing search engine for checking across the Internet. This is a stand alone module and thud doesn't require connection to an external plagiarism detection service - but it should also be noted that it is probably not as consistent in detection as a specialised service.

Information on installation and usage can be found at www.moodle.org and at the creator's website, CrotSoftware - www.crotsoftware.com

Just for Fun: Birthdays

A simple block, available from www.moodle.org, that will create a block on your homepage to display birthdays of class members. The teacher or administrator can choose how long a birthday should be displayed both before and after the actual birth date. Great for class celebrations!

Just for Fun: Twitter block

This block creates a really simple panel on the homepage, or course page, that returns the results of an input Twitter search.

Simply upload the latest version to your blocks directory (download it from www.moodle.org) and away you go.

Just for Fun: Certificate

The Certificates module creates PDF certificates and diplomas for students. It's completely customisable - you can add borders, pictures, watermarks etc. Great for rewarding particular good practice or just for fun at the end of a course.

Installation is the /mod folder then login as Administrator and click "notifications" to activate.

Just for Fun: ActiveUsers

This is a Moodle block that displays the most active users on your course or site along with a ranking. This can be configured so that a student's photograph is displayed alongside his/her ranking. A bit of fun - but there's no harm making getting involved a little competitive too!

Once again, available from www.moodle.org

And now ... it's your turn

The examples given in this resource are just the tip of the iceberg, there are hundreds more modules, hundreds more sites with content developed for the Moodle VLE - get out there and take a look.

As we've highlighted, www.moodle.org is the best place to start - but there are many, many more areas where "Moodlers" hang -out, share experiences and swap resources - a Google search will get you on the way and then it's a case of finding what interests or benefits you (and your students) most.

The authors wish you "Good Luck" and "Happy Moodling"

The VLEs4VET project has been funded with support from the European Commission under the Lifelong Learning Programme. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



