

## Moodle/SLoodle Experiments Documented via Blog Entries on MSc in e-Learning 2011

Austin Tate - a.tate@ed.ac.uk

<http://holyroodpark.net/search/index.php?weblog=Moodle&owner=261>

September 15, 2011

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Austin Tate

### Moodle/SLoodle Experiments - Issue 1

A couple of years back we rigged up a Moodle VLE server (<http://moodle.org>) and set up some "courses" to support collaborative meetings especially to allow for file resource interchange and sharing, and for questionnaire's and feedback during meetings. We connected the web site to a meeting space in Second Life (<http://secdondlife.com>) using the Sloodle set (<http://sloodle.org>). The server still runs at <http://openvce.net/moodle>

I am interested again in Moodle 2 and recent work on a much richer in world linkup using the Sloodle kit which can now support rich shared media in Second Life, and important for the future, the open source OpenSimulator (<http://opensimulator.org>). We want to tie the questionnaire and shared resource handling more closely to intelligent systems for meeting room support - in our I-Room work (<http://openvce.net/iroom>).

I plan to use this blog to document progress, trials and tribulations as we go along in the hope others might find it useful.

The first thing was how messy all the information was on what the most recent versions of Sloodle were available and for which versions of Moodle. As a lot of people still use Moodle 1.9.x rather than the more recent Moodle 2.x. As usual a short e-mail to one of the core users in such a helpful community got me on the right path. But even then download links were stale, out of date copies had been archived and their link blogged

rather than the original material, etc. So job number 1 was to start a web page with the up to date information as I found it... trying to show original URLs but also providing convenient URLs (in some cases to locally stored resources). That page is at <http://openvce.net/sloodle> and will evolve as things change or corrections are needed.

So to our main openvce.net web and database servers... the requirements for Moodle 2.1 means that a later version of PHP is needed than our computing support team are happy to have running due to security. This will be fixed, but not in an immediate time frame. So we use our usual backup experimental arrangement using one of the AIAI servers on which we have XAMPP to provide a convenient and simply managed Apache web server, MySQL database server, PHP and Perl scripting.

I am an optimist, so I unpack Moodle 2.x install it in the right place in the web server and just start the install script in a web browser. Ah well. Not so fast Austin. It complains the PHP version on XAMPP is JUST one sub release too old. Pity.

A close down of all services, an uninstall of the services, a reboot, a big safe backup of the web area, data base and some local files on the experimental machine, archive and an hour later I can try again. I put on the new version of XAMPP, reinstate the data base and web areas, put back the new Moodle area, etc. And kick it all back into life. A BIG PHP not running error in the browser stops me short. Half an hour of fiddling, no joy. Something in XAMPP upgrade has gone wrong.

Luckily I can roll back. ALWAYS CREATE A BACKUP BEFORE YOUR UPGRADE. Half an hour later and I am back to where I started with a slightly too old XAMPP and no Moodle 2.x. To be tried again another day. Watch for the next install meet.

Ah well, that's where the weekend went. I did still manage to see the Italian Grand Prix run at Monza on TV though, and was pleased Jenson Button came through to 2nd.

September 18, 2011

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Austin Tate

## Moodle/SLoodle Experiments - Issue 2



I attended a briefing about the new SLoodle 2 toolset on the EduNation III region of Second Life on Sunday 18-Sep-2011 by Paul Priebisch (avatar name: Fire Centaur). About 30 other educators were there.

The new toolset assumes a viewer that can support shared media a.k.a. media on a prim (MOAP). It currently runs in Second Life, and will soon be ported to OpenSim. It works with Moodle 1.9.x. In Moodle 2.x the quizzes may not yet function correctly, but most of the rest of the virtual world side set should. A feature of SLoodle 2 is the ability to set up "scenes" and rapidly rezz them in and around a classroom for a lesson, and then tidy them away so the ability can be re-used. The quiz chair can be set up to give rewards to students, or "penalise" them for failure... including dumping them in a shark filled pool with realistic screams!

As usual links and resources, and full size versions of these images of the demo meeting, are being gathered at <http://openvce.net/sloodle>

September 22, 2011

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Austin Tate

### Moodle/SLoodle Experiments - Issue 3

A way to display good quality text is important in the classrooms. Shared Media/Media-on-a-Prim (MOAP) allows a small number (say 4-6 simultaneously active) feeds from web pages, video, Flash, etc. to be visible on prim surfaces (like screens). This can include dynamic content from Moodle and other content management systems on the web. Note that many feeds from URLs can be set up... but only a few can show at once, the others simply turning off when not in view or when too many are in view.

But it is possible to show **much** more on screen when textures are rendered in world or images are uploaded and shown in world directly from the asset data base. This is how most presentation screen have worked in Second Life and OpenSim until recently when Shared media/MOAP appeared. The trick is to use BOTH mechanism in a classroom - using uploaded images and displays where possible, but using the small number of MOAP feeds for dynamically delivered shared content.

October 10, 2011

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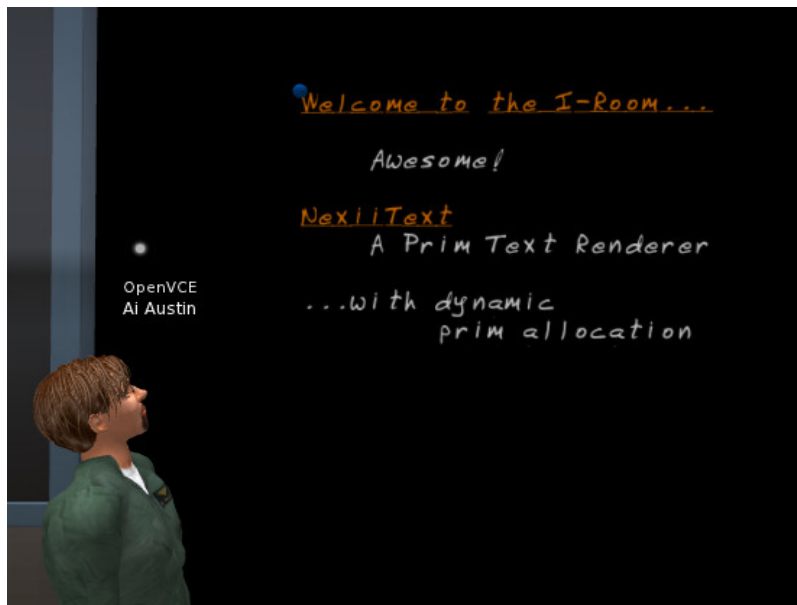
Austin Tate

### Moodle/SLoodle Experiments - Issue 4

We have been held up for a while in our experimentation with Moodle/SLoodle since the new versions (2.1.2 as at 10-Oct-2011) required a later version of PHP than our servers were set to. Apache/PHP changes are strictly controlled in the School of Informatics to address security issues,

so its not something we can change quickly. Our main servers should be updated within the next month, but meantime, we updated a test server and now have a working Moodle 2.1.2 with a standing "course" for OpenVCE experimentation.

A new PhD student has started with our group, Punyanuch Borwarnginn from Thailand, having just completed the MSc in AI here. Her work will be in the area of Intelligent Learning Environments, and she will start with looking at aspects of Moodle, SLoodle and virtual worlds-based I-Room technology. Her blog on initial ideas is at: <http://openvce.net/ile-proposal>



But what if we could show dynamic text content as well using previously uploaded content via fonts in the asset data base, with display of characters from those fonts on prims set up as a display/blackboard.

Nexii Malthus in Second Life (previously an active member of the Second Life Teen Grid, and now on the main grid) has created a very nice text display using inworld font textures to do just this. Details at <https://wiki.secondlife.com/wiki/NexiiText2>

October 22, 2011



Austin Tate

## Moodle/SLoodle Experiments - Issue 5

I have now used the admin account to set my self with a role of "course creator". Logging back on as myself I had the extra site administration menu to create a course. The setup was pretty easy and I set up a sample "IDEL11 Moodle" course... adding in a few initial "blocks" for a course collaborative Wiki (choosing simple visual NWiki editing style), a survey element, and a simple radio button style quiz showing everyone the answers to date before and after the vote.

The screenshot displays the Moodle/SLoodle interface for the IDEL11 course. At the top, it says "You are logged in as Austin Tate (Logout)". The main content area is titled "IDEL11" and shows a "Topic outline" with 10 topics. The first three topics are: 1. IDEL11 Moodle Wiki, 2. IDEL11 Moodle Survey, and 3. IDEL11 Moodle Choice of VLE. The left sidebar contains a "Navigation" menu with links to Home, My home, Site pages, My profile, and My courses. The "My courses" section is expanded, showing the IDEL11 course with sub-links for Participants, Reports, General, Topic 1, Topic 2, Topic 3, and I-Room. Below the navigation menu is a "Settings" section with links to Turn editing on, Edit settings, Users, Grades, Backup, Restore, Import, Reset, and Question bank. The right sidebar contains a "Search forums" section, a "Latest news" section, an "Upcoming events" section, and a "Recent activity" section. The "Recent activity" section shows activity since Saturday, 22 October 2011, 05:49 PM. At the bottom, there is a "Moodle Docs for this page" link and a "Home" button.

The site uses the latest stable Moodle 2.1.1. It is not set up to scale or be properly managed so we will just add students manually for our testing. But after I get some of the basics I would be happy

to let anyone on the IDEL11 course join a sample "IDEL11 Moodle" course as a student if they want to look round or have not used Moodle before.

When I have things working reasonably, I would be happy to manually add users accounts with role "Student" for other IDEL11 participants who wish to explore Moodle a little.

October 23, 2011

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Austin Tate

#### **Moodle/SLoodle Experiments - Issue 6**

I have been in contact with the SLoodle development and test community in the last few week, as they are preparing a release that can work with the latest Moodle 2.1+. The time now seems right to try the alpha code version they have prepared, and after a brief exchange this week updated to 2.0.10 alpha. This could be near to being set as the first Moodle 2.0+ and 2.1+ SLoodle release. Previous versions only worked with the older Moodle 1.9+ releases.

I have also been in touch with the SLoodle web site folks to point make suggestions on improving the descriptions of how to obtain and build a SLoodle setup. These changes were made to <http://sloodle.org> on 23-Oct-2011.

I now have the 2.0.10 alpha Moodle modules zip distribution and in world SLoodle rezzer object from the "Fragile" systems dispenser in Second Life on the Chilbo region:

- [http://download.socialminds.jp/sloodle/sloodle\\_v2.0.10-alpha.zip](http://download.socialminds.jp/sloodle/sloodle_v2.0.10-alpha.zip)
- <http://maps.secondlife.com/secondlife/Chilbo/181/19/93>

So, these are ready to start testing a SLoodle classroom in Second Life with our Moodle 2.1.2 setup. I have made notes and given links to assist people intererested in Moodle and SLoodle at <http://openvce.net/sloodle>

Addendum: Cron job now set to run every 5 minutes to handle messaging and other matters. Set up as scheduled task on the server. See <http://docs.moodle.org/20/en/Cron>

October 24, 2011

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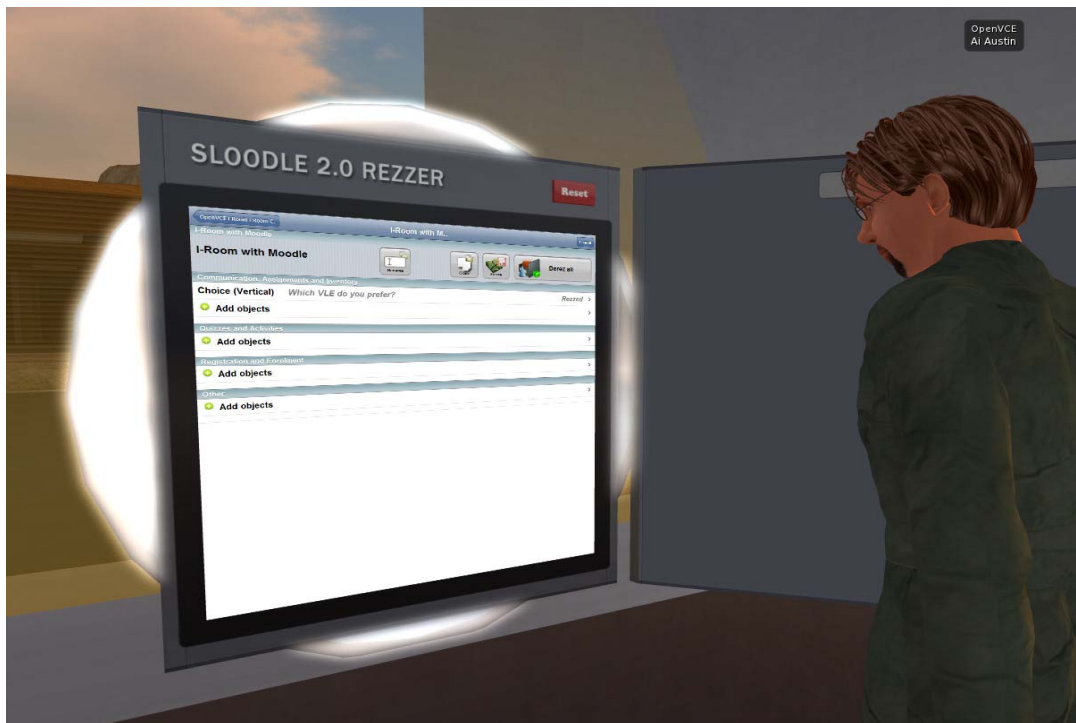
Austin Tate

### Moodle/SLoodle Experiments - Issue 7

After a small change in a login method made by Edmund Edgar, one of the SLoodle developers, to one file at mod/set-1.0/shared\_media/index.php the 2.0.10-alpha release of SLoodle works in the SLoodle classroom on the VCE region in Second Life connected to Moodle 2.1.2.

This change will be in the next build. The experimental classroom is at

<http://maps.secondlife.com/secondlife/VCE/223/226/23>







October 28, 2011



Austin Tate

### Moodle/Sloodle Experiments - Issue 8

I have been testing elements of the Sloodle Second Life toolkit version 2.0.10 alpha alongside Moodle 2.1.2 and the Sloodle module 2.0.10 alpha with a few revisions being made by Edmund Elgar, a Sloodle developer and one of the owners of Avatar Classroom (<http://avatarclassroom.com>). The testing is throwing up some minor issues and a couple of PHP scripts have been changed as a result. They will appear in the next alpha test build of Sloodle as the developers move towards the first beta version suitable for Moodle 2.



To date the tests have included:

1. chat link up between a Second Life classroom and the Moodle chat tool, and logging of authorised by individual avatars in world
2. in-world assessment delivery drop box
3. presentation screen using shared media web based image, video and web page URL assets
4. multiple choice voting and presentation display

October 28, 2011



Austin Tate

### Moodle/Sloodle Experiments - Issue 9 - Mobile Apps

There is an iPhone/iPod/iPad app called "My Moodle" which provides mobile device access to Moodle 2.1+. See <http://itunes.apple.com/us/app/my-moodle/id461289000>



The experimental Moodle 2.1.2 site at AIAI now has mobile web services enabled as required to support this app - they are off by default. See

[http://docs.moodle.org/20/en/Enable\\_mobile\\_web\\_services](http://docs.moodle.org/20/en/Enable_mobile_web_services)

My initial attempts to snap a screen shot image with an iPod and upload it via the My Moodle app indicated the file exceeded the maximum upload file size, yet the PNG file involved was only 44KB... and our site is set for upload file limits of 8MB to 128MB depending on what layer is filtering.

A future road map for development of the My Mobile app is available. See

[http://docs.moodle.org/dev/Mobile\\_app](http://docs.moodle.org/dev/Mobile_app)

October 30, 2011

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Austin Tate

### Moodle/SLoodle Experiments Issue 10 - Cron and the Zombies

Its Halloween, and the Zombies have attacked!

There has been a bit of a struggle to get the "cron" job running on the Moodle setup. cron.php is an admin routine that is run every few minutes to do a number of maintenance things, like pulling in information feeds, external blogs, clearing away pending messages, etc. It need a bit of setting up and a couple of different mechanisms using the Windows Task Manager had not been working correctly.



I had settled on a way to initiate the cron.php script by calling it from a job every few minutes which launched the Firefox/Mozilla browser run the job, and then should have terminated. I got that suggestion off blog postings by others who has similar problems getting cron to run. It seemed to work after I set it up on testing, so I left it for a day or so... But when I came back... spookily... there were many "Zombie" processes running. My colleague experienced in these matters tells me that happens when you launch a browser to run a script in a web page and he had seen this issue before.

We are also still working to get the outward bound e-mail going on our Moodle 2.1.2 setup on Windows. This is way more complicated than it should be with many layers involved. Settings are all over the place in Apache, PHP, Moodle and beyond your machine in the SMTP server you use, as well as perhaps in multiple firewalls and out bound messaging spam filters on the way. We have been gradually picking our way through these layers. Our University will not allow e-mail out with a "from"

address that is not validated as a legitimate University address - sensibly. So we are having to use a "Moodle Admin" address personally tied to a staff member at the moment, which is not ideal. We have established a "noreply" address that will validate now too. More layers to work out before its working properly I am afraid.

In general, I also am finding a lot of Moodle settings are hidden away a bit or are in several places or in multiple layers whic all need to coordinate. Things like e-mail setup is under Site Administration - > Plugins -> Message Outputs -> E-mail. The site admin/support e-mail addresses also appear there and in Site Administration -> Server -> Site Contact. Rooting round to change the roles an individual is assigned is also convoluted, rather than just a set of check boxes off the user page you have to edit roles... and not via the edit button but by knowing to click on the role title hyperlink. And some roles are considered "System Roles" which are changed on a different web page.

November 10, 2011

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Austin Tate

### **Moodle/SLoodle Experiments Issue 11 - Walled Garden or Castle Battlements and Labyrinths**

Our experience of setting up Moodle as an administrator, for a couple of sample courses of different kinds (weekly, topic based and social format) and by adding in the SLoodle module both in the web end of Moodle and in Second Life classroom has been a frustrating experience. This is a mostly due to the very many layers of user permissions, user roles, different styles of setup, confusion over what happens at site, user and course levels, and interactions between these, and so on. We still cannot work out why some users can see their SLoodle profiles and others cannot even with all permissions ticked on (more than should be needed).

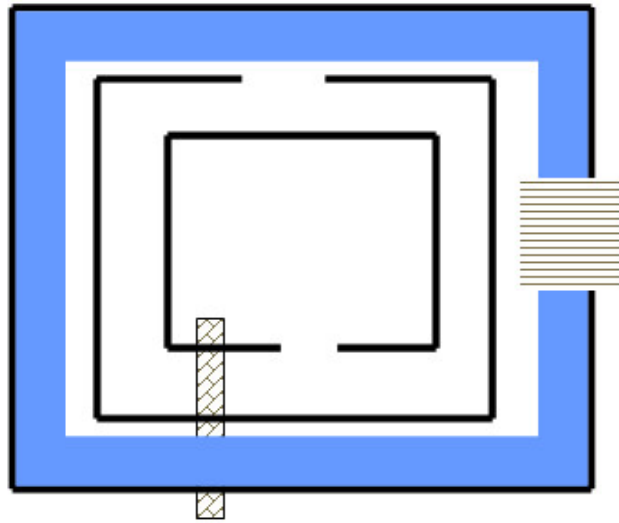
This makes me think of the "Walled Garden" idea which is how I see VLEs like Blackboard's WebCT. The wall is there for a number of reasons:

- To protect those inside;
- To protect and control access to the assets inside;
- To keep out undesirables;

- To provide a clear gateway where people can enter, or request entry.



**Walled Garden with Gate**



**Castle Defences with Moats,  
Drawbridges & Secret Tunnels**

But my mental picture of Moodle is more like a complex arrangement of "Castle Defences" with multiple battlements, with entry points offset from one another and the direction to turn not obvious at every level. There are moats and some bridges across. But you are not sure where they all are. There may even be secret tunnels you don't know about and that others may be able to use, and you suspect there are as its all so labyrinthine.

November 25, 2011

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**Austin Tate**

#### **Moodle/SLoodle Experiments Issue 12 - Customised Inworld Object**

With kind support from Edmund Edgar I have been experimenting with the "Demo Object" in SLoodle, which is a stub or template for developing customised objects in Second Life or OpenSim which can connect with a corresponding module in the Moodle VLE.



## Moodle Module Setup

The Moodle "demo-1.0" module is in the standard Sloodle distribution - I am using version 2.0.10 alpha. And can be found in `mod/sloodle/mod/demo-1.0`. The `object_definitions/default.php` script should be altered to "show" the object in the inworld Rezzed.

Edmund Edgar points out:

Note that if you have syntax errors in an object definition file or extra whitespace outside the PHP brackets, lots of things will break.

The in-world object will need an extra script:

`.../mod/sloodle/mod/set-1.0/sloodle_rezzer_object.lsl`

which deals with setting up communication with the server, and sends linked messages to any other scripts in it with information about the Moodle server it needs to connect to, and any other configuration parameters it might have.

## Inworld Object Setup

1. An object should be created in world with default name "SLOODLE Demo Object" or an alias "SLOODLE 1.1 Demo Object" both of which are permitted by settings which act as exemplars in `object_definitions/default.php`
2. Into this object, two scripts should be placed. One is obtained from `.../mod/sloodle/mod/demo-1.0/sloodle_mod_demo-1.0.isl` The other is a generic script and can be obtained from `.../mod/sloodle/mod/set-1.0/sloodle_rezzer_object.isl`. These are the base that can be used to create a custom module.
3. Set the permissions of the in world object and its scripts as appropriate and then take a copy into inventory.
4. Drop that object into the contents of the inworld SLOODLE Rezzer.

You should now be able to use the Rezzer as normal to select an appropriate SLOODLE controller and scene, and then under "Other" objects you will find the "Demo Object" which you can add to the scene. After it rezzes in a default position close by the Rezzer, reposition it where you want, and then hit the "Freeze" button on the Rezzer screen to sync the current position of the scene objects.

## Other Templates

There are some other objects in the Sloodle kit which can also act as guides, such as the "SLOODLE Tracker Button" which when clicked in world communicates with a Moodle module and gives a message back.

## Current Status

At the time of writing I have the SLOODLE Demo Objects rezzing from the SLOODLE Rezzer, but don't yet have Moodle responding through it. Testing continues.

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At 14:25 10/12/2011, Edmund Edgar wrote:

XML-RPC is used by the distributor tool to allow you to choose an object in Moodle and get it sent to an avatar in-world. IIRC it isn't used anywhere else. We plan to rewrite that to use HTTP-in instead, but we haven't got around to it yet, as we've found XML-RPC unreliable in the past.



It wouldn't surprise me if a grid that doesn't allow incoming XML-RPC doesn't allow incoming HTTP-in either. That would break Sloodle 2 rezzer, and also the mechanism that we use for updating the new scoreboard when scores change. We'll be using HTTP-in more in future, so it will break more tools going forward.

We do have a plan to add a method to fall back on HTTP polling for situations where HTTP-in won't work (either because the Moodle won't let traffic out or because the grid won't let it in), but it'll probably be a while until we do it.

December 06, 2011

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Austin Tate

### **Moodle/Sloodle Experiments Issue 13 - External Tools as Course Activities**

Moodle 2.2 released today (6-Dec-2011) includes a facility which allows for the embedding of tools that are provided externally as activities on courses. Close integration is possible using the IMS Global Learning Tool Interoperability (IMS LTI) standard. See

<http://www.somerandomthoughts.com/blog/2011/11/28/moodle-2-supports-connecting-to-ims-lti-tools/>

The screenshot displays a Moodle course interface. At the top, the Moodle logo is visible, and the user is logged in as Austin Tate. The breadcrumb trail indicates the path: Home > My courses > IDEL11 > Topic 5 > Holyrood Park Blog. The left sidebar contains a 'Navigation' menu with links to Home, My home, Site pages, My profile, My courses, and various topics. Below this is a 'Settings' menu with options for LTI administration, Course administration, and user settings. The main content area features a header for 'The University of Edinburgh Holyrood Park Blogs MSc in E-learning'. Below the header, there's a section for 'Austin Tate :: Blog' with links to post a new entry, view the blog, archive, friends' blogs, interesting posts, view all posts, and download the blog as HTML or RSS. The blog post, dated December 03, 2011, is titled '[Restricted] Finally, We Meet' and discusses the IDEL11 course. An embedded video player shows a group of people in a meeting. The right sidebar includes a 'You' section with a profile picture and name, a 'Recent Activity' section with links to view activity, friends, and presentations, and a list of friends including Christine Sinclair, Clara O'Shea, Rory Ewins, Ania Rolinska, and Hamish Macleod.

But the same mechanism allows for effectively any external tool to be easily embedded (above showing the Edinburgh MSc in e-Learning IDEL11 Course Holyrood Park ELGG Blog). The simple mechanism just means you input the URL from which the tool or contents are served. More advanced facilities allow for proper IMS LTI integration. See the image of the advanced version of the tool options.

## Navigation

## Home

- My home
- Site pages
- My profile
- ▾ My courses
  - PEC1
  - ▾ IDEL11
    - Participants
    - Reports
    - General
    - Topic 1
    - Topic 2
    - Topic 3
    - Topic 4
    - ▾ Topic 5
      - Holyrood Park Blog**
  - I-Room

## Settings

- ▾ LTI administration
  - Edit settings
  - Submissions
  - Locally assigned roles
  - Permissions
  - Check permissions
  - Logs
  - Backup
  - Restore
- Course administration
- Switch role to...
- My profile settings
- Site administration

Search

## Updating External Tool in Topic 5

## General

\* Hide advanced

Activity Name\*

Holyrood Park Blog

Activity Description\*

Font family Font size Format

**B** *I* U ABC x x' |

Path:

☐ Display description on course page☐ Display activity name when launched☐ Display activity description when launched

External tool type

Automatic, based on Launch URL

Launch URL

http://holyroodpark.net/

Secure Launch URL\*

Launch Container

Embed

Consumer Key\*

Shared Secret\*

☐ Unmask

Custom parameters\*

Icon URL\*

Secure Icon URL\*

## Privacy

☒ Share launcher's name with the tool☒ Share launcher's email with the tool☒ Accept grades from the tool

## Common module settings

\* Hide advanced

Visible Show

ID number\*