

iMOOC: Building a platform from existing software components

Vitor Rocio,
Universidade Aberta, INESC-TEC
vjr@uab.pt

The challenge: build an iMOOC course

- Requirements:
- learning resources;
 - social network;
 - peer assessment;
 - QUIZZES;
 - weekly teacher feedback.



The ECO project

- The iMOOC was connected to the ECO project, that requires the integration of users of several MOOC platforms.
- This task did not require new code.
- The central learning analytics required in the project, required new code, but not changing existing code, that is vital to keep low maintenance costs.
- The courses run in this project, required also a simple virtual machine.
- This confirms the advantage of reusing existing projects with mature code.

The integration: Moodle and Elgg



- Moodle act as a LTI provider to Elgg
- The user sees Moodle in a Future, does not know that there are two systems

Improvements:



- Multiple courses;
- Social network integration;
- An integrated search;
- Questions / Sugestions?

The infrastructure



- Only one simple virtual machine was enough to 1000 participants
- The infrastructure is easily split in frontends with web server and backend with the database, and the backend can even host both Moodle and Elgg databases.

The options:



- Build a new platform;
- Select an existing one;
- Combine two platforms.

The advantages:

- the source code is mature, and well supported, with already many users testing it;
- all the functionalities required were already implemented for a long time;
- the most complex, peer assessment, evolved over time in Moodle, and is now easy to use;
- both platforms are open to new plugins, that can be useful if some new functionality is needed;
- we only need to maintain the integration code



José Coelho,
Universidade Aberta, LE@D
jcoelho@uab.pt

The results: iMOOC course on Climate Change

- Analysis done in page views, users and posted messages
- Easy to do since both platforms have activity reports and record all events.

Table 2 reveals that 43% of the users are active during the course, even considering that only 2% completed the educational activities.

iMOOC: Building a platform from existing software components

Vitor Rocio,
Universidade Aberta, INESC-TEC
vjr@uab.pt

The challenge: build an iMOOC course

- Requirements:
- learning resources;
 - social network;
 - peer assessment;
 - quizzes;
 - weekly teacher feedback.



The ECO project

- The iMOOC was connected to the ECO project, that requires the integration of users of several MOOC platforms.
- This task did not require new code.
- The central learning analytics required in the project, required new code, but not changing existing code, that is vital to keep low maintenance costs.
- The courses run in this project, required also a simple virtual machine.
- This confirms the advantage of reusing existing projects with mature code.

Improvements:



- Multiple courses;
- Social network integration;
- An integrated search;
- Questions / Suggestions?

The integration: Moodle and Elgg



- Moodle act as a LTI provider to Elgg
- The user sees Moodle as a Forum, does not know that there are two systems

The infrastructure



- Only one simple virtual machine was enough to 1000 participants
- The infrastructure is easily split in frontends with web server and backend with the database, and the backend can even host both Moodle and Elgg databases.

The options:



- Build a new platform;
- Select an existing one;
- Combine two platforms.

The advantages:

- the source code is mature, and well supported with already many users testing it;
- all the functionalities required were already implemented for a long time;
- the most complex, peer assessment, evolved over time in Moodle, and is now easy to use
- both platforms are open to new plugins, that can be useful if some new functionality is needed
- we only need to maintain the integration code



José Coelho,
Universidade Aberta, LE@D
jcoelho@uab.pt

The results: iMOOC course on Climate Change

- Analysis done in page views, users and posted messages
- Easy to do since both platforms have activity reports and record all events.

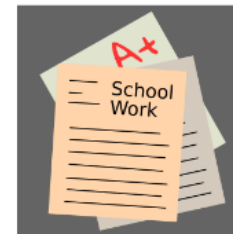


Table 2 results that 10% of the users are active during the course, even considering that only 1% completed the individual activities.

The challenge: build an iMOOC course

Requirements:

- learning resources;
- social network;
- peer assessment;
- quizzes;
- weekly teacher feedback.

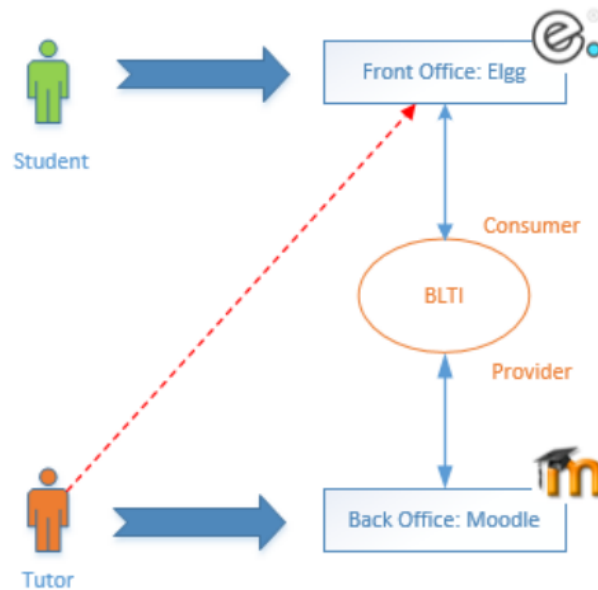


The options:



- Build a new platform;
- Select an existing one;
- Combine two platforms.

The integration: Moodle and Elgg



- Moodle act as a LTI producer to Elgg
- The user sees Moodle in a Frame, does not know that there are two systems

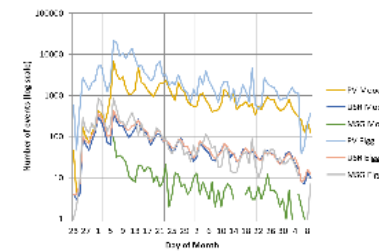
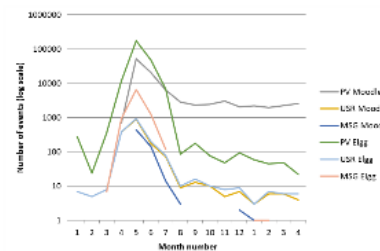
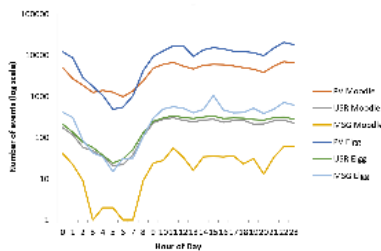
The advantages:

- the source code is mature, and well supported, with already many users testing it;
- all the functionalities required were already implemented for a long time;
- the most complex, peer assessment, evolved over time in Moodle, and is now easy to use
- both platforms are open to new plugins, that can be useful if some new functionality is needed
- we only need to maintain the integration code



The results: iMOOC course on Climate Change

- Analysis done in page views, users and posted messages
- Easy to do since both platforms have activity reports and record all events

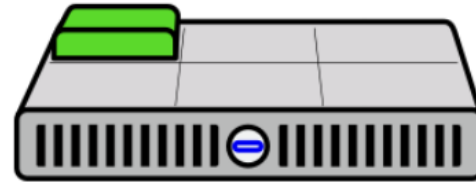


Days with posted messages						
Days with pageviews	0	1	2-10	11-100	101-1000	Total users
1-2		356				356
3-10		470	1			471
11-100		414	5	14	36	469
101-1000		21	1	1	3	28
Total users	961	7	15	39	2	1024

Posted messages					
Pageviews	0	1	2-10	11-100	Total users
1		246			246
2-10		316	3		319
11-100		264	57	14	335
101-1000		40	21	47	117
> 1000		1	1	5	7
Total users	867	82	61	14	1024

Table 2 reveals that 45% of the users are active during the course, even considering that only 3% completed the evaluated activities

The infrastructure



- Only one simple virtual machine was enough to 1000 participants
- The infrastructure is easily split in frontends with web server and backend with the database, and the backend can even host both Moodle and Elgg databases.

The ECO project

- The iMOOC was connected to the ECO project, that requires the integration of users of several MOOC platforms:
 - This task did not require new code
- The central learning analytics required in the project, required new code, but not changing existing code, that is vital to keep low maintenance costs.
- The courses run in this project, required also a simple virtual machine
- This confirms the advantage of reusing existing projects with mature code

Improvements:



- Multiple courses;
- Social network integration;
- An integrated search;
- Questions / Sugestions?