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Title:

### abiertaUGR: a MOOC framework based on online learning communities

### Authors:

Miguel Gea, Centro de Enseñanzas Virtuales, Universidad de Granada, Spain Rosana Montes, Centro de Enseñanzas Virtuales, Universidad de Granada, Spain Roberto Bergaz Hernandez, Máster Gestion de Procesos de Negocios. Universidad de Granada

#### Abstract

Massive online courses (MOOC) are adopting popularity in Higher Education due to the ability to create online contents for wider student communities. This is also a new way to adapt Informal learning on universities using non traditional model, engaging OER, gamification models and participatory gamedriven mechanism (badges, peer review, reputation). Our approach (abiertaUGR) is based on a social approach to create MOOCs. This framework allows us to construct an online learning community where each user has a personal learning environment (PLE) and also activities for engaging teamgroups and social networks. Most of MOOC strategies focus on increase the highest number on enrolment in the courses, so the success of the courses are rated using this data. In our case, the methodology is based on the community building, so our parameter are oriented in terms of course completion rate, activity indicators, PLE building, satisfaction and fidelity. Some of these parameters are good indicators of quality assessment and lifelong learning strategies for wide communities attached to Higher education Institutions.

# Introduction

Massive open Online Courses (MOOC) is a current trend for creating online courses in the aims of Higher Education Institutions to have free good quality teaching initiative with relevant visibility on Internet. This model has been conducted through inter-institutional platform of courses (i.e. Coursera[1], EdX [2], Udacity [3], as well as MiriadaX [4] in Spain). These approaches should represent new models for open learning [5] as a relevant role for (future) universities. These approaches may overcome the following issues:

- How quality and success of these courses are measured. Sometimes these aspects are focused mainly on the number of student enrolment and completion rate.
- Purpose and outcome of these courses. These methodologies are the same as campus-based courses (content and assessment methods), but loosing innovative practices in online education [6].
- Recognition and connection with the pedagogical model of higher education institutions. These courses should be connected with other formal learning strategies offered from universities.

AbiertaUGR [7] is a good example as a case study to understand the relevance of involving universities at MOOC strategies. This proposal has been developed using features that should be taken into account in this scenario:

- Use OER for learning activities and promotion of user-generated contents
   [8]
- Creation of online learning communities [9]
- Recognition at Universities

The courses have been developed to a wide community in order to adquire transversal competences and skills currently required in graduated tittles. Some of the most relevant competences are the following:

• Knowledge and skills for an autonomous learning by creating their own

personal learning environment

- Enhancing the collaboration and work in groups
- Enhancing the creativity, Leadership, and reputation in a online community of learning

These abilities are engaged in a context of social learning enhanced in the abiertaUGR platform using common technologies (blogs, twitter, groups, bookmarks, debate, etc.). It is conceived as a social community: each user is shown in the platform (figure 1) as a living community with his/her own personal learning environment (figure 2)



### Figure1. abiertaUGR social learning platform

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demuestran un interés en el aprendizaje mediante MOOC.	Twitter: @usalab	@anaManzRu, @eraser, @buscandolapolar,
Puntos: 142	Blog: http://utopolis.ugr.es	@PedroCartujo 49 minutes ago
Editar imagen de perfil	Cursos realizados:	@belenaveleta gracias Belén! intento sacar tiempo y aplicar los consejos del ourso
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	Sobre mi:	about 2 hours ago

figure 2. user profile with the personal learning environment

# Analysis of results

This initiative started on April with a series of courses oriented to internet technologies for learning, each one has 4 week duration with a recognition of 1 ECTS credit:

- Digital identities. <u>http://goo.gl/yHcam</u>, 8th of April (finished)
- Ubiquitous learning. <u>http://goo.gl/7bCZo</u>, 18 of May (ongoing)
- Creative common and Open Education Resources. http://goo.gl/yV8dC

Up to now, we have the following data of these courses

	Enrolled	Completion	Completion Rate
Digital Identities	1.805	620	34,3%
Ubiquitous learning	971	(*)	-
CC and OER (**)	662	-	-
Community	2.654	-	-

(\*) Ongoing (\*\*) Not started

A wide community has followed this initiative on Internet. During these months, we have identified an increasing traffic of visitors. Some of these data as shown below:

	March	April	Мау	Total
Visitors	6.140	14.678	6.169	26.987
Num of visits	12.045	32.289	12.155	56.489
Trafic				
Duraction visitas	465s	1281s	1291s	

Evaluation methods are based on activities to promote the learning on the community facilitating tasks and goals to enhance participation, automatic recognition (through badges) from the activities performed, and facilitating the social recognition and reputation as another learning skill. Some activities are done in groups so we enhance the collaboration through the community to develop these results. Some activity indicators in the first course are shown below (activity during four weeks):

Activity indicators	1st week	2nd week	3rd week	4th week	
Documentation	1841	1085	641	113	
Activities	532	445	358	0	
Interviews	926	295	629	0	
Debate	1901	993	877	0	
Tasks	169	813	285	0	
WorkGroup (4 groups)	0	0	0	688	
PLE (some data)	689 Blog		1275 bookmark		

This activity means that the community is living (in a high percentage) during the four weeks, also with a good maintenance in the personal portfolio (PLE) a well as with group activities.

User Satisfaction from Course Resources					
	Very weak	Weak	Correct	Good	Excellent
Platform	1,3%	10,7%	26,1%	47,0%	15,0%
Workspace	2,2%	13,4%	35,3%	35,8%	13,4%
Contents	1,7%	2,6%	18,6%	45,5%	31,6%
The participation availability	3,0%	3,9%	14,2%	37,3%	41,6%
Course planning	0,9%	8,2%	23,6%	39,9%	27,5%
Tutoring and mentors	2,2%	5,2%	31,3%	33,9%	27,4%
Technical support	3,9%	15,6%	30,3%	32,0%	18,2%
Twitter use	4,0%	9,3%	31,9%	34,5%	20,4%
The community (personal					
PLE)	3,0%	9,4%	27,0%	42,9%	17,6%
Working groups	3,5%	12,8%	31,0%	37,6%	15,0%

Finally, other data about user satisfaction in different aspect are shown below.

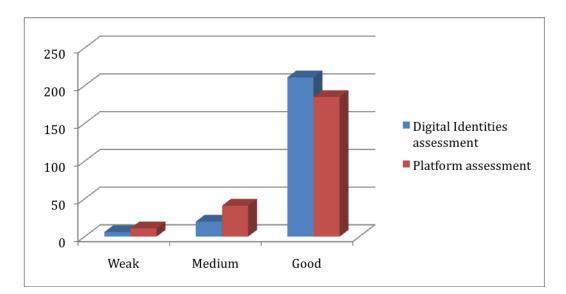


figure 3. User satisfaction

## Conclusions

This paper presents a novel model to create massive open online courses based on online learning communities. The purpose is to create living communities to learn and acquire digital competences such as reputation, participation, collaboration, critical assessment, use of technology, etc. These issues are connected with the Higher Education Institutions for a lifelong learning process to the society and connecting these courses with some kind of recognition of informal learning. These study has been supported with the some data of the first course in this approach.

# References

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