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Universitat Autònoma de Barcelona

EUNIS

# eLearning

WORKSHOP

New Models of Learning and Accreditation

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## EUNIS ELTF Workshop

Universitat Autònoma de Barcelona, 28th-29th April 2014

### New models of learning and accreditation



#### Workshop Report:

These are very summarised notes about each of the sessions and readers are encouraged to follow the links to the full presentations.

#### 1. Members Showcase Sessions

The following members gave updates on recent activities and the presentations are available on the event website.

**SIGMA Gestión Universitaria, AIE: Joan Busquiel** - described the development of two-way integration between Sigma SIS and Moodle so that enrolment information can be uploaded from SIS and grades fed back from Moodle so they have also developed a Meta group facility so to accommodate different groups for on-campus and online teaching. They have about 1000 users per day.

**Universidad de Zaragoza: Marisa Sein-Echaluce** - talked about how they are applying the concepts of social and adaptive learning to create 'intelligent MOOCs' between the universities of Zaragoza and Madrid. The learners on these MOOCs are mainly motivated to learn things that will help them in their working lives. They have been making use of LinkedIn and Google Plus on some courses. They will be including more adaptive tools in the next version.

**UPMC-Sorbonne Universités: Antoine Rauzy and Yves Epelboin** - talked about how the concept of MOOC didn't fit their University strategy so they opted for SPOC (small private online courses) instead. They were able to transform many pre-existing lecture capture resources for re-use. This involved breaking the video into much smaller chunks ( usually 8 x 25 mins). They want to have the first two years of all of their courses in SPOC format for use in blended/flipped learning (not distance learning). It is unusual for UPMC to undertake developments so quickly. They are in the rather unusual position of resisting MOOCs for the outside world yet pushing quite hard for these kind of developments internally.

**University of Valencia: Jaime Busquets** - talked about seeing improved marks for students who are using their Matterhorn lecture recordings. The University uses Sacchi but is trying to create content in neutral format for deploying on different platforms. They are using Google, Course Builder and OpenEdX. They are also involved with EMMA [European Multiple MOOC Aggregator](#) which aims to provide automatic translation to multiple languages.

**University of Lleida: David Barroso** - a University with 10,000 students covering 30 degree subjects at undergraduate and masters level. All courses have space automatically created in Sakai. The University uses mainly open source products (apart from Turnitin) including Kaltura lecture capture and Big Blue Button. They offer integration via the learning tools interoperability IMS standard. They are creating Sakai4MOOC. They realise that they might get better visibility from using a platform such as Coursera but they are a small University and they intend to start small offering OOCs rather than MOOCs. The areas of greatest demand in the University at the moment are e-portfolios and learning analytics.

**University Paris Descartes: Thierry Koscielniak** - relies on an 'open source trilogy' of only three core tools: Moodle, Mahara and Elgg. The University has been working on making traditional lectures more interactive by developing interactive questions using Moodle and BYOD as an alternative to EVs (clicker) type technologies.

**University of Aarhus: Dorte Sidelmann-Rossen** - described how the University strategy in 2012 aimed to move from 5 learning management systems to 1 (Blackboard) and to ensure that 60% of teachers were offered competence development within the next three years. Improving feedback mechanisms was also an important feature of the strategy: there are both empirical and theoretical reasons for this and a lot of student demand. The University included a section on peer feedback on its teaching course for tutors so that they could then go on to apply the concepts in their own teaching. The use of the rubrics has definitely improved peer feedback.

## 2. Keynote Sessions

### **MOOC: HEI and Business collaboration on accreditation and business models at Universitat Autònoma de Barcelona (UAB)**

UAB is exploring three different types of MOOC activities:

1. Coursera
2. Flipped classroom SPOCs
3. Certified MOOCs (signature track model where the course is free but students pay for a certificate)

UAB is a prestigious institution and they are the only Spanish public University that is in Coursera. They are doing a small number of MOOCs in areas as diverse as Egyptology and pre-calculus in order to demonstrate the very different range of things that UAB offers. Even in their MOOCs there is teacher contact e.g. tutoring using Google hangouts and tutors react to student performance by creating videos as supplementary materials on things people are finding difficult. Only 30% of their MOOC students are in Spain the rest are outside (Mexico 15%; Colombia 11%).

The issues they have uncovered include:

- scalability
- curriculum demand - how to accommodate personal learning with official certification models
- big data - how to get information from big data
- feedback into the current system- how to get MOOC students enrolled on degrees
- entering new markets

they are currently working on a range of different models such as:

- the signature track certified MOOC(experience shows that people who pay for certification are much more likely to complete their course).
- accreditation of SORCs (small online restricted courses).
- business collaboration to deliver a tailored learning portfolio providing on demand curriculum for SMEs.
- Applying the MOOC idea to research e.g. the possibility of 'industrial doctorates'.
- other options such as voluntary student donations (UAB thinks the potential of this should not be underestimated).

They are also looking at accreditation models for ECDL to try to move from the classic model to a virtual offer.

## **FUN at Sorbonne Paris Cité: A MOOC programme from the centre Virchow-Villermé at France Université Numérique**

Sorbonne Paris Cité is one of a number of consortia created in response to French government pressure for universities to work together and share services (overall 100 French universities are now part of 30 different such consortia). Sorbonne Paris Cité is interesting in that it consists of 4 universities and 4 other HEIs all with different views on technology and pedagogy.

The Centre Virchow-Villermé is a Franco German collaboration (named after two 19th-century doctors) that is doing a lot of research on big data related to health and is also offering MOOCs on health-related topics. They are using the FUN platform (France Université Numérique) built on OpenEdX. Their 25 MOOCs have 200,000 subscribers. They need to think very carefully about who their MOOCs are aimed at as some of them are very specialist.

They believe very strongly that peer assessment is an essential element of the MOOC and they use Moodle to support this. The learners also organised a wiki for themselves. They use Google hangout to enable learners to chat with the tutor.

The French term for learning technologist is 'pedagogical engineer' and these engineers have been looking at how lecture capture can be used to support MOOCs. They have found that the visible presence of the teacher does not really add anything and is often a distraction so their lecture resources are now audio only supported by a much richer media slideshow for example that zooms in on particular aspects of the slide that the lecturer is talking about.

Many lecturers getting involved in MOOCs see them as a one-off activity and have not given any thought as to what they will do with all of the resources once the MOOC is finished or whether it will ever run again

### **Assessment and feedback in the digital age**

Assessment and feedback is one of the key sources of student dissatisfaction with the learning experience in the UK and a major problem in terms of staff workload. The presentation looked at how going back to first principles about the type of learning and teaching you want to promote helps improve assessment practice and aids decision-making about what type of technologies can be used to support assessment and feedback.

Examples from the UK showed how building in activities such as peer assessment can better prepare students for the world of work. There was also discussion of the shift in the balance from summative to formative assessment and hence in assessment **of**, to assessment **for**, learning in order to focus on learner longitudinal development, feeding forward and ipsative approaches (whereby feedback acknowledges progress against the learner's previous performance regardless of achievement).

These are issues for all types of learning but are likely to assume increased prominence in relation to online learning as the model of accredited MOOCs seems to be gaining ground.

### **Learning Analytics**

Analytics has been identified as a key trend in education but collecting, using and sharing data is nothing new. Statutory and regulatory requirements from government, professional bodies, statistical agencies have meant that the higher education sector is increasingly being pushed to gather data for all sorts of purposes but what analytics if offering is an opportunity to use data in more innovative ways to evidence performance and inform educational decision-making.

The growth of the web has led to an explosion of digital data through social networking, online transactions, mobile computing etc and technological advances such as the advent of Web 2.0 and HTML5 have led to the 'Big Data' challenge. What are we going to do with all this information? How can we make best use of it? What analytical tools and methods do we need to make sense of it all? Across all sectors, the concept of Business Intelligence (BI) is being established as a way of enabling



institutions to focus on systemically using data more effectively for decision-making and providing evidence or organisational performance. This makes use of analytics across a range of contexts so where does Learning Analytics fit into this picture?

Learning analytics has been identified as a key educational trend (mid-term, 2-3 yrs to adoption) in the NMC Horizon Report 2013 (HE edition) and is a fast growing area of technology enhanced learning.

Drivers

- Big data – the possibilities of using learner data gathered at a large scale – demographics, assessment data, cross institutional, national/international
- Online learning - growth of MOOCs. Sophisticated web tracking tools to track behaviours and levels of learning. Can help inform development of instructional software - real-time progress. Can be applied to blended environments and smaller scale
- Demand for measures on performance – business intelligence on learning i.e. motivators to increase retention and support at risk or underperforming learners
- Informing research and developing pedagogies
- Student experience

A useful definition of learning analytics comes from the 1<sup>st</sup> international conference on LA and Knowledge (LAK) and has been adopted by SoLAR (Society for Learning Analytics Research) '*Learning analytics is the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimising learning and the environments in which it occurs.*'

This is only one part of a broader picture of using data for educational management. So what's the difference between LA and Academic analytics? There is cross over but:

- Academic analytics = more institutional level and beyond to support decision-making and educational management. Supports wider issues around learning e.g. Student recruitment
- Learning analytics = is more focused on learning itself.

There are various types of analytics being conducted:

### **Analytics dashboards**

Not really a type of analytics but more a focus on importance of visualisation to help non-technical users interpret the data more easily. Dashboards appear in most online learning platforms – Blackboard Learn, Canvas Infrastructure – promise of improving performance engagement of staff and students and providing measurable insights into the process.

### **Assessment analytics**

One of the more traditional areas where data is systematically collected at different organisational levels (module, course, institutional, national). Combining performance data with other student data provides richer picture of how at-risk students can be identified and supported. This is the main area/focus of predictive analytics

### **Predictive analytics**

Combining static data (demographics, past attainment) and dynamic data (e.g. online logins, number of posts in discussion forums) to help identify patterns to enable more timely interventions with 'at risk' students.

### **Social learning analytics**

Grounded in learning theory - focus on learning in a participatory online culture - SNA and discourse analytics. Social Network Analysis - focus on relationships and interactions with others. Makes

visible the structures and dynamics of personal networks. Discourse Analytics - Goes beyond the quantitative e.g. how many logins to more qualitative data e.g. quality of interactions. Focus on sensemaking.

### **Adaptive Learning Analytics**

These platforms build a model of learner's understanding through tests/diagnostics. They are focused on learner cognition and fine-grained feedback. Modelling of learner cognition and personalisation are key to these intelligent tutoring systems.

#### **Benefits:**

##### **Micro-level benefits (Learning Analytics):**

- Identify at-risk learners and provide interventions
- Provide learners with insight into their own learning habits and give recommendations for improvement.

##### **Meso-level benefits (Academic Analytics):**

- Improve decision-making and organisational resource allocation
- Tailor course offerings and methods of delivery
- Evaluate teaching performance and support academic development

##### **Macro-level benefits (Academic Analytics/Big Data):**

- Transform the college/university system, as well as academic models and pedagogical approaches.

#### **Risks:**

##### **Adoption and leadership commitment**

Culture, leadership issues – recognising the importance of analytics as a way of supporting learners more effectively and enriching the student experience. But we don't want to be data driven – focus should be on the qualitative

##### **Data skills gap**

Investment in staff development is critical – not just technical expertise but data literacy of users. Skills to evaluate and interpret information.

##### **Data v expertise**

Is data telling us something we don't know as educators?

##### **Data quality**

Data quality and general systems selection, deployment issues, mission-critical systems failures

##### **Ineffectual interventions**

Down to interpretation? Lack of timely action – need for support and ongoing process improvement

##### **Big brother approach**

- Monitoring rather than supportive culture, negative impact on individuals and learning
- Ethical issues and what is desirable or appropriate is critical – not just legal issues e.g. DP

##### **Delayed adoption**

- Missed opportunities and ultimately competitiveness.

##### **Key factors for success seemed to be:**

- Leadership and culture
- Skills and expertise
- Clear vision and strategy – purpose needs to be clear
- Processes and infrastructure
- Data quality
- Pedagogy

**Further information:**

EUNIS is supporting the [Learning Analytics Community Exchange](#) (LACE) project.

### **3. World Café discussion**

**About the technique**

World Café is a process for bringing people together to work on issues of importance to them. The process has been used around the world in different types of cultures, communities and organisations for many different purposes. It is founded on the assumption that people have the capacity to work together no matter who they are. The emphasis on the process and the value of diversity is different to many other approaches to collaboration that focus on bringing the ‘right people’ together. In World Café the ‘right’ people are the people who are there what matters is that you facilitate the right type of dialogue. There are various ‘creative commons’ resources available in a range of languages to help plan [World Café](#) conversations. World Café conversations are held in pleasant informal surroundings and participants often work in small groups around café type tables with food and drink available to emphasise the social nature of the interaction.

Participants may discuss a single question or hold multiple conversations on different aspects of a topic. What is important is the way in which participants get to hear a range of different viewpoints and build upon them. This is achieved by having several rounds of conversation and inviting people to move tables between rounds. Each table has a facilitator or ‘Host’ who remains at the table while the rest of the group moves on. The Host then briefs the new group on what came out of the previous conversation. He or she will be aided by notes and doodles etc that the group has left behind. As participants carry key ideas or themes to new tables the range of perspectives enriches the conversation and leads to new insights. A few several rounds of conversation the whole group comes back together to connect the overall themes that have arisen.

The EUNIS ELTF group talked about three topics

- the future of MOOCs
- social learning
- learning analytics

For each topic we looked at the vision for the future, issues and challenges, examples of good practice and ideas for how the EUNIS community should be engaging with this topic.



## The future of MOOCs

### Vision

It was evident from the increasing range of terms being coined (MOOC, OOC, SPOC and SORC were all used during the day) that there is no single vision or one size fits all approach across Europe. The opportunities are very different for different types of university and also different countries. For example the significant numbers of Spanish speakers outside Spain and with good Internet access makes them a very different target market to the French speakers outside France who are very often in areas with limited Internet access.

There was a general feeling, and this is nothing new, that online learning could help improve learning and teaching practice as part of a blended approach to free up face-to-face teaching time for more value-added activities.

Some universities see MOOCs as a way to demonstrate their strengths to the outside world thus increasing recruitment whilst others still believe there may be ways of making MOOCs more financially viable e.g. supporting the course with a paid for e-textbook.

Some participants felt that the sheer amount of data generated from MOOCs will help us understand more about how people learn although others were more sceptical about this pointing out that we know the types of learners who get the most out of MOOCs are quite heavily skewed and may not represent the typical target population for many universities.

One group came up with a metaphor of a Christmas tree with its roots as a traditional university degree and the decorations on the tree representing the MOOCs a lifelong learner might undertake to keep updating and supplementing their knowledge till they reach the star at the top: the pinnacle of their professional career.

### Issues and challenges

There is a lack of clarity on the part of students and institutions about what they can actually expect from MOOCs. It was even proposed that some MOOCs aren't actually courses at all and amount to no more than marketing material for universities.

The best examples of supported learning activity remained difficult to scale up and there was some debate around whether a franchise approach could work with a leading professor creating a course and this being franchised to a range of delivery partners who could support learners.

Some participants felt we were moving towards a situation where we need a core set of design standards to aid lifelong learners who might take a variety of MOOCs whilst others felt that killing the diversity in courses posed a real risk.

The cost of creating MOOCs is an issue and so universities felt that the most sensible approach is to create a small number and analyse them well so that we can apply the learning to other blended learning activities.

Assessment and accreditation were the topic of much discussion. We are increasingly moving in this direction but understanding how to assess these types of activities is not easy (models of distance surveillance of examinations are already popping up e.g. a company called ProctorV working with Coursera). Few people believed we would reach a point where you could achieve a full degree via MOOC and it was suggested that MOOCs are little recognised as evidence of prior learning at present.

Other issues included concerns around data security and the difficulty of accommodating these types of activity in existing university structures and processes.

## **Examples of good practice**

it was felt that we might have a tendency to underestimate the good practice that is already happening and in particular that we should be celebrating the use of OERs and ensuring that resources in MOOCs are genuinely open. Repurposing learning content for use in MOOCs is helping us take a more sophisticated approach than basic lecture capture and is making us think much more about how to structure that learning content and integrate self-assessment to genuinely enhance learning.

It was felt that the opening up of learning content is a great driver for improving quality although there is still a challenge in introducing appropriate quality assurance measures into traditional university processes and that designing new types of learning activities challenges teachers to improve their own practice.

The scale of MOOCs does offer new opportunities in areas such as peer support. As an example there are little-used Q&A forums in all learning management systems but the quantity of responses in MOOCs makes these resources much more used and useful.

## **Ideas for the EUNIS community**

Participants wanted to see more sharing of experience and good practice and would like to see the community contributing to guidance on what makes a successful MOOC and to use the EUNIS website for sharing short video interviews with practitioners. It was also suggested that it would be useful to undertake a review of the existing platforms and make some recommendations about standardising approaches.

## **Social Learning**

### **Vision**

The importance of the social aspects of all types of learning were emphasised and it was recognised that the need for face-to-face contact will never go away. This is evidenced by the fact that Coursera has recently announced it is creating a global of physical learning centres. There are factors such as demographics and location that effect how comfortable learners are with different types of learning. The vision is to create a variety of ways in which students can interact with the tutors and with one another and technology can do much to support this. The 'flipped classroom' whereby students watch recorded lectures in advance and then use the class time for discussion is gaining a lot of support.

### **Issues and challenges**

We need to be clear what we mean by 'social'. Just using a social media channels for dissemination isn't the same thing e.g. watching a video on YouTube isn't social it is just another way of delivering a lecture.

It was suggested that all courses and tutors these days need to have a digital identity and we can look to examples of good practice to help other institutions develop a social media strategy. It was noted that support for learning and teaching really needs to be controlled in some way by the University whatever tools are used. There was debate around whether it was better to use university owned tools or to make use of commonly used channels but try to improve our links to analytics etc to be clear about what we are achieving. Is the University the provider of social learning or the teacher of how to use the available tools? There was a question around the extent to which students buy into University control: often they move to a different platform that they feel is their own virtual space.

It was noted that there are strong cultural differences in the extent to which students feel comfortable with various forms of social learning whether this be peer reviewing and critiquing others' performance or being afraid that they may be seen to be asking stupid questions in a situation or platform where that lecturers is present.

The fact that virtual social channels are 'always open' can be positive for some learners who would not otherwise have opportunities to interact but it can also raise expectations that support and answers will be available 24 x 7.

### **Examples of good practice**

There are lots of good examples of innovative design in physical learning space e.g. the e-learning Cafe at the University of Porto which is promoting interdisciplinary learning as students from different subject areas get together to help one another solve problems.

Some institutions are already using apps and learning platforms effectively to connect students and lecturers and the next stage is to promote much more peer to peer interaction between students. This can be tied in with the flipped classroom idea whereby students watch the video and are then required to discuss it with one another before they come to the classroom discussion.

We need to take note of and allow space for 'invisible learning' by this we mean the informal learning that takes place in a range of social settings.

### **Ideas for the EUNIS community**

Participants wanted to share more good practice around social learning including both the underlying pedagogy and the technical tools used. They also wanted to share good practice on managing digital identity.

It was suggested that EUNIS could make better use of social networking tools and it appears that not all members were familiar with tools such as the Twitter account (@EUNIS\_IT) and LinkedIn network that already exist.

## **Learning Analytics**

### **Vision**

Participants were keen to make the most of learning analytics to deliver the benefits already discussed such as understanding the factors that impact student retention, predictive tools to identify learners at risk of dropping out, as an instrument for creating different pathways for different learners, as an instrument for managing teaching performance and as a tool to aid better learning design. The vision is however very clearly that this should be a pedagogic tool and not about monitoring.

### **Issues and challenges**

There are issues around data security and also a range of ethical issues around ownership of the data, confidentiality, privacy and trust. There is a need for clear policies on data access.

Making progress in this area has significant cost and resourcing implications.

There is a need to establish data standards and manage data quality issues. Data that lends itself to analytics is not just stored in the LMS - we need to identify and understand a wide range of data sources.

It was recognised that there are limitations on what data can tell us and we need to be clear that it is only a support for our own good judgement. Staff need a lot of support in understanding and interpreting the data if they are to make good use of it.

### **Examples of good practice**

An example was given whereby Danish and Swedish institutions had used analytics to help them understand the benefits of students focusing on one module at a time whereas many universities continue to run a range of very different modules in parallel.

There are examples relating to the development of adaptive systems e.g. simulations for teacher development such as the ACME tool developed jointly by UAB and the University of Girona.

The open source Student Success Portal tool ([SSP](#)) was also mentioned.

**Ideas for the EUNIS community**

Again there was a request for a review of what people are already doing and what good practice we know about.

There was a suggestion that it would be useful to do some work on definitions for learning analytics and maybe come up with a common framework for analytics.

It would be useful to work with the BI Task Force to join up approaches on this topic.

There is a need for guidance on data management, data standards and managing data repositories.