A NEW EDUCATIONAL PARADIGM: FROM E-LEARNING TO CLOUD LEARNING (C-LEARNING). KNOWLEDGE IN THE CLOUD

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INTRODUCTION: THE STATE OF THE QUESTION AND THE QUESTION ITSELF

- Now education is experiencing one of its major changes. In the Internet age, the changes are so great that each worker needs to improve its training every five years or less. And that education offers better results when using remote tools.

- The technology surrounds everything. There is a clear concern about a pedagogical change that will bring an innovative teaching methodology, a new model that will go hand by hand of Distance Learning, based on technology as an example of a way of teaching to teach and learning to learn online and during all professional life.

- How is the reality of education supported by technology? and / or How does these two main actors: teachers and students, combine it?

- That is the technological reality, in which generations are involved at the Spanish Universities. The surprise is that these students were using the more prevalent tools.
INTRODUCTION: THE STATE OF THE QUESTION AND THE QUESTION ITSELF

- It's a new profile that we propose as Cloud Learning (c-learning), referring to the Cloud Computing concept. In this sense, the teacher figure becomes a Educational Community Manager who works with Web 2.0 tools and this leads to a kind of teaching in the Cloud.

- The students use more the not-formal environment than the formal means and training platforms.

- Then... Who use the platform of formal training in education then? Why those media recourses are not used in massive way instead of others? How responsible is the teacher for the non-use of learning platforms? This situation led us to rethink the teacher role and the pedagogical model of learning.

- On the other hand, if formal education and digital spaces of education offered by higher education institutions are adequate. On the contrary, it would be more interesting to jump into digital non-formal spaces.
THE PHYSICAL CLASSROOM TO THE VIRTUAL CLASSROOM: THE WAY AHEAD
The traditional training of Higher Education starts from the teacher as a director, being the main transmitter of knowledge.

Into the present system the students are participants in their education process. Is it enough in these times where technology helps in training?

The introduction of ICT’s in academic field offer a new teaching style, based on training aimed at students, the use of tools, the proliferation of digital repositories of information and access to the intellectual process in a collaborative environment, where the pedagogical paradigm is learn to learn.

The first step is to have a good e-tutor, who is considered a fundamental part of the educational process.
E-TUTOR AND EDUCATIONAL SUPPORT TO THE E-MODERATOR
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- Features and abilities of the online teacher make way for the e-moderator.
  - Thus, trainers have to manage information, searching for materials and resources to support their students.
  - They also have to experiment with the required technology for the formation of students, fostering a collaborative environment, using the tools of communication to be near to the students, always seeking to facilitate learning, creating contents, both didactic and organizational resources and been responsible for the academic supervision.
  - The basic roles of teachers: The most important characteristics and skills, as well as pedagogical and communication strategies are based on the understanding of the online process, technical skills, online communication skills, expert content and personal characteristics.
  - Benito Osorio "the essence of a good moderator is enthusiasm, commitment and intellectual dedication..." (Benito Osorio: 2009, 160).
ONLINE TEACHER’S ROLES

Source: (Ryan et al.: 2000, 110). Figure 1. Basic roles of teachers.
COMMUNITY MANAGER (CM): DEFINING THE CONCEPT
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- The figure of the CM has its origin in 1990. Since 1996, it became to highlight with social networks and blogosphere in the Web 2.0.

- AERCO President, José Antonio Gallego: CM as "the person who is responsible for maintaining and taking care of the faithful follower community attracted by the brand or company and who should be the link between the needs of themselves and the possibilities of the company. To reach this aim, the CM must be an authority in the use of Social Media Tools (AERCO and Territorio Comanche: 2009, 4-5).

- In addition, the CM must be an early adopter of technology, have a geek component and used communication tools (blogs, email, Wiki...).
CHARACTERISTICS OF COMMUNITY MANAGER (CM)
Characteristics of Community Manager (CM)

- In some virtual environments in educational experiences it has been identified that students require more than an e-moderator, a new profile as a Community Manager. **Teacher figure is studied as Community Manager**, but in a Moodle environment (Martínez, Fossas and Cobo, 2010, 112-121), that is to say in a **formal digital environment**. Taking this and other work as a starting, we approached the figure and its characteristics.

- But we **cannot restrict teachers to Moodle**, as educational formal environment, especially taking into account the possibilities of the cloud (Internet).

- If something should characterize a **CM is to come and "move" where the customers are**, in the case of higher education are the students and the subject or matter to be taught.
CHARACTERISTICS OF COMMUNITY MANAGER (CM)

- The CM is a **dynamizer**, and he has other responsibilities, such as listening, browsing the network to analyze contents.
- CM also has to **explain, answer and talk on social media**, with members of their community.
- CM must **try and anticipate applications** to know them first and then to recommend them. They have to be creative, to be ahead and innovate in the use of applications although it does not seem to have a use for learning in this case.
- Related to the **technical skills** of a CM it is necessary being a real expert in the subject. They should have knowledge about communication as well as a teacher. CM must able to listen and to give answers and being decisive in them. They should value the opinions of others, guiding and maintaining respect for participant comments.
CHARACTERISTICS OF COMMUNITY MANAGER (CM)

- Other qualities are to be receptive to its audience, empathetic, caring and assertive.
- They should be able to coordinate, organize, share and be the first to work as a team.
- The CM needs to be a leader, identifying and drawing upon other community leaders. In case of teachers these leaders could be partners, professional workers and even their own students.
- "Always on" and ready for help others. With this knowledge CM will enable to build bridges between members to collaborate together.
- The CM is the evangelist of their subject.
- CM works with Web 2.0 tools to create digital communities within a virtual environment via Internet In short: Cloud Computing.
TEACHING TOOLS FOR A COMMUNITY MANAGER

- Tools and e-Learning Platform.
- Tools and Blogs, social networks and multimedia networking.
- Virtual Reality Tools.
- Tools Productivity.
- Monitoring Tools.
- Hardware and future devices.
TEACHING TOOLS FOR A COMMUNITY MANAGER

- The CM reaches its peak thanks to the evolution of technology. It comes up, becomes importance and meaningful thanks to this technology, especially taking in mind collaboration, communication and social tools.

- Knowledge is put into the cloud, which is the Cloud of Learning.

- It is interesting to approach the non-formal educational use of tools used by students.

- The Community Education Manager can not forget the formal educational platforms and also their services (wiki, chat, email, content delivery services...).
TOOLS AND E-LEARNING PLATFORM

Educational Platforms of Formal Education:

- Blackboard (blackboard.com)
- dotLRN / OpenACS (dotlrn.org)
- Claroline (claroline.net)
- Sakai (sakaiproject.org / portal)
- ATutor (atutor.ca)
- Moodle (moodle.org)
- Dokeos (dokeos.com/es)

Tools for choose the training platform:

- E-Learning workshops (elearningworkshops.com)
- UNESCO Website (UNESCO org)
- EdTechPost (edtechpost.ca)
TOOLS AND BLOGS, SOCIAL NETWORKS AND MULTIMEDIA NETWORKING

- In the **non-Formal Education**, the **Blog** is one of the best tools for creating communities, aimed at a topic or matter. Blogging tools as Bitacoras.com, La Cotelera (lacoctelera.com), Blogger of Google (blogger.com), WordPress (wordpress.com) or MovableType.

- **Potcast** and the phenomenon of **Livestreaming** are based on those blogs. Tools for Livestreaming: Tumbar (tumbar.com) or Posterous (posterous.com).

- The use of **social networks** and **microblogging** have created a new training system called **Social Learning** (s-learning). Tools: Yammer (yammer.com) and Social Cast (socialcast.com) Twitter, Facebook, Tuenti (in Spain), LinkedIn (linkedin.com)...

- Social networks have the same applications that the e-learning platforms (forum, chat, e-mail...).

- **Multimedia networking**: YouTube or Flickr (flickr.com).
VIRTUAL REALITY TOOLS

- Among virtual reality education tools in the Cloud (Cloud Learning) we stressed **Second Life** (secondlife.com) and **OpenSim** (opensimulator.org).

- A growing number of higher education institutions are increasingly using Second Life as a teaching tool.

- It has even emerged a project called **SLOODLE** (sloodle.org) whose objective is the development of education through the integration of Moodle with OpenSim users and / or Second Life.
There are a set of tools for producing content for blogs, like Ecto (illuminex.com / ecto), Tweetdeck (tweetdeck.com) and Seesmic Desktop (seesmic.com).

For online project management: Basecamp (basecamphq.com). For mailings management tool we found MailChimp (mailchimp.com).

Social Oomph (socialoomph.com), Friendorfollow (friendorfollow.com), Huitter (huitter.com) and others tools facilitate the management of accounts with Twitter.

Google has an office suite (Google Apps - google.com/apps-) with email (Gmail), chat and video chat service (GoogleTalk), Word Processor (Google Docs) Website (Google Sites), among other functions. We have also to mention Google Wave.
**MONITORING TOOLS**

- The Community Education Manager (CEM) can track their visits on websites, what is said about him and his stuff... with the monitoring tools.
  - **Google Scholar** (scholar.google.es).
  - The **Google Blogsearch** (blogsearch.google.es).
  - **Google Trends** (google.es/trends), for trends.
  - **Socialmention** (socialmention.com), which monitors an item on blogs, microblogging, websites, images...
  - **IceRocket** (icerocket.com) is a blog search engine.
  - **Twitter Analyzer** (twitteranalyzer.com), **Twitter Search** (search.twitter.com) and **Tinker** (tinker.com).
  - **Facebook Lexicon** (facebook.com/lexicon) or tracks trends, using keywords, showing the volume of posts.
  - Statistical service of websites, **Google Analytics** (google.com/analytics).
HARDWARE AND FUTURE DEVICES

- The first item to appear was the mobile phone, which has been integrated successfully in Internet, becoming a more leisure means, giving rise to m-learning.

- The PC's laptops have decreased in size and have gained in performance, thus resulting in the Notebooks, as well as hybrid devices between PC and mobile phones: PDA's, Pocket PC's, SmartPhones, iPhone and Tablet PC (IPAD).

- We must add the New Google’s ChromeBook to this list, the first notebook PC that works entirely in the cloud and whose educational version of the Google I/O, will cost of $ 20 per month.

- But consoles like the PSP, the Nintendo Wii and DS, have joined the world of Internet and learning games.
CONCLUSIONS
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- Never before **higher education** had been surrounded by so many elements, resources and tools, excellent professionals and learning models.

- Young digital natives are involved in real digital environments, using what Internet tools in particular and technology in general offers them. The teacher has to **be aligned not only with students but also with the social reality**.

- We highlighted the importance of the **Community Manager figure** in today's digital environment, its skills and attitudes, and its role in going out and find customers outside the formal fields, wherever they are.

- For this reason, the teacher who will act as e-moderator in training platforms, will need something else. This teacher have to become a **Community Education Manager**, who know, use and follow the same Web 2.0 services that their students use, creating their own networks, communities and worlds.
CONCLUSIONS

- This new type of teacher has a set of communication social skills, being always online, looking at trends in technology and, of course, technical skills that has grown to currently become not only an expert in its area but also in the use and dissemination of technology services of 2.0 Web (blogs, microblogging and social networks), within a new computing paradigm, Cloud Computing.

- All digital environments both formal and informal education, regardless of the methodology (e-learning, b-learning, s-learning, m-learning...) and the technology used. These systems are developed in the Internet, in the cloud, which are grouped into a single education system that is the c-learning. Thus, the battle of the formation of higher education is being waged in the cloud, using the same "weapons" and means that our students use.
AERCO and Territorio Comanche. La Función del Community Manager. 2009.


