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Red UnX: From a MOOC Platform to a Mobile Learning Community for Entrepreneurship in Latin America

UnX is an innovative on-line community for entrepreneurship that promotes open education and collaboration in Spain, Portugal and Latin America (Ibero-America). It aims to:

- promote on-line lifelong learning, particularly the skills and competences needed for the digital economy, such as digital competencies, app development, languages and new business models

- encourage knowledge-based entrepreneurship

- foster inclusion in higher education, focussing particularly on students, the under-employed and the unemployed.

UnX uses Massive Online Open Courses (MOOCs) to offer training to large groups of people and social tools, both Facebook and tools they have created themselves, to make it easy for users to interact with each other. With a range of courses and innovative on-line motivation and accreditation mechanisms, they plan to enhance entrepreneurship skills in the digital economy using on-line distributed, peer-to-peer learning.

It is a platform to help all sorts of people become active and entrepreneurial in their professional lives, not just those who are already entrepreneurs.

The UnX Entrepreneurship Community is now optimising the MOOC platform for mobile devices so that its target audiences can learn wherever they are and however they like – on the bus, on the train, at home, etc, opportunities uniquely enabled by mobile technologies. Their ultimate goal is the development of a more creative, entrepreneurial, engaging and inclusive society through the use of innovative pedagogy. Their mission is to identify and develop tools and methodologies to facilitate this process, reaching out to students wherever they are in terms of aspirations and local realities – all without setting foot inside a classroom.

The learners

It is not easy to identify learner profiles in the open learning arena but analysis of the social networks, including Facebook, suggest that:

- 77% of users are male and 23% female

- most are 20–40 years old, with the majority being students and the unemployed

- they come mainly from Spain, then Brazil, Colombia, Peru and Portugal.

The site has had nearly 25,300 unique visits in the last 8 months, of which 12.5% were made through a mobile device, generally the Apple iPad.

Within the next two years, however, it is anticipated that visits to the site via mobile devices will increase to more than 50% – roughly half (53%) from mobile phones and half (47%) from tablet devices.

The partners

The UnX project is coordinated by the Center for Virtual Education (CSEV) in collaboration with Telefónica, Santander, UNED (National Distance University –Spain), RedEmprendia (a network of universities promoting responsible innovation and entrepreneurship in Ibero-America) and the Center for Mobile Learning, MIT (Massachusetts Institute of Technology).

The methodological framework

UnX is based on connectivism, an e-learning theory that knowledge is distributed across society so you need to interact with your peers to access information and build knowledge. As defined by Siemens[1] and Downes,[2] the starting point for learning occurs when a learner connects to and feeds information into a learning community, which is a node arising out of the connection points found on a network. Nodes vary in size and strength, depending on the concentration of information and the number of individuals involved, and a network comprises two or more nodes linked in order to share resources.

1 Siemens, G. (2004). 'Connectivism: a learning theory for a digital age'. http://design.test.olt.ubc.ca/Connectivism
2 Downes, S. (2008). 'Connectivism: a theory of personal learning'. www.slideshare.net/Downes/connectivism-a-theory-of-personal-learning

The UnX Community

UnX combines courses that promote entrepreneurship and self-employment with social networks. They also work with business enterprises to publish news and information regarding online and off-line job opportunities and events. New entrepreneurs can access tutoring and mentoring, information about financing, business angels, awards, grants and other opportunities.

UnX courses:

- 'Entrepreneurship and Mobile Application Development with App Inventor': promotes the creation of mobile apps using MIT App Inventor, a graphical tool that enables even non-programmers to create apps for Android devices.

- 'Transversal Competences for Entrepreneurs': enhances entrepreneurship skills and provides the knowledge needed to implement a business idea. Transversal competences relate to attitudes and values (such as team work and decision making) and procedures (such as the capacity to analyse and synthesise).

- 'Basic Digital Competences in Virtual Education Environments': teaches learners to manage information on-line, assess different information sources, collaborate, communicate, create content and use technology to solve real-life challenges.

- 'Mythology for entrepreneurship': draws lessons from the great myths on how to improve entrepreneurial skills.

- 'Professional English for Entrepreneurs': offers an executive language course on the 1,000 English words most frequently used in business.

Taking part in the UnX Entrepreneurship Community

Participants enrol on free MOOCs to build their entrepreneurial skills by accessing open structured courses and / or interacting with their peers in a social environment, building up an open community of knowledge. The MOOCs draw on open, flexible content from websites, wikis, open education resources and social networks, and they can be scaled up to respond to demand. The learning is based around knowledge acquired from the community and individuals working together (social and peer-to-peer learning), while the activities draw on challenge and game-based methodology.

UnX uses an on-line badge-based approach to accreditation and certification. Badges (or insignia) are visual indications of levels of achievement, skill or knowledge, and mark exceptional involvement in a reading, discussion, group work or virtual events. The UnX platform also awards 'Karma' (social reputation) points, which measure participation in the UnX Community via the forum, Q&A and blog. There are currently three levels of Karma: 'learner', 'expert' and 'guru'. This system means less reliance on course professors, which is particularly important given that there are potentially thousands of students involved in a MOOC.

Once participants have their certifications and badge credentials they are ready to create their own enterprises and start-ups. They also remain in the UnX Community, establishing local communities of entrepreneurs and sharing their experiences with their peers.

"We wanted to launch a pioneering experience that combined social networks and training: a community with the common thread of open training – available to everyone and free of charge – in priority areas for the whole society. In line with the evolution of learning models we strongly believe in the power of mobile technology for the potential it offers for entrepreneurs to get known to the world through the Internet." **Daniel Torres,** Director General, CSEV

'Learning on the Go'

The UnX 'Learning on the Go' mobile strategy will adapt the MOOC platform and educational content to mobile devices (currently iPhone and Android). The professors who teach the MOOCs will work with the app developers to develop on-line and off-line educational apps. They will use new learning-focussed technologies, such as geo-positioning and augmented reality, which will be embedded on the MOOC platform or offered separately (by the Apple store and Google Play, for example).

The apps will enable the Community to make more connections with with social networks and local opportunities; they will enhance opportunities for collaboration; and they will improve the sustainability of the whole open learning experience.

The UnX MOOC mobile platform will:

- be tailored to the learner's time and location
- be mobile device-friendly (screen size, resolution, etc.)
- offer off-line access to content (through the native off-line app)
- offer resources in several languages (currently Spanish and Portuguese, soon to include English)
- include a calendar of meet-ups and local opportunities
- include a project gallery, experiences (geotagging) and bookmarks
- offer social networking with peers and mentors
- use 'Get mobile' credits (credits obtained from digital devices) for class credits (official academic credits) and other user engagement mechanisms.

Native apps

- The native on-line apps offer extra and complementary content to open courses and enrich the resources available in the community. These apps will be embedded in the UnX platform and they wiill be available in the marketplaces too.

- The Learning on the go strategy also includes off line apps, because they permit access to the UnX extra content (exercises, demos and extra documentation) with no internet connection. Off-line Apps will reduce data plan cost, offer high quality video playback and the ability to download extra content when on-line to view later.

Milestones to date

In its first eight months UnX has gained more than 18,000 registered members: 13,500 of them (75%) are following courses while 4,500 (25%) just take part in Community activities.

Many European, American and Latin American universities and institutions are now working with UnX to offer entrepreneurial training and job opportunities for the digital economy. In addition to UNED and MIT, Alcalá University and UAPA (Open University for Adults of the Dominican Republic) are offering joint MOOCs at UnX, while other institutions, such as HP Catalyst Grant, Qualcomm Wireless Reach and Escuela Virtual Mercosur, are sponsoring courses and challenges. Yet more organisations are providing funding, leading projects, launching technological platforms and creating content for new MOOCs.

CSEV was awarded the 2013 NMC Center of Excellence Award for 'Outstanding achievement in the application of technology to teaching, learning, or creative inquiry' in recognition of UnX's development of on-line learning environments.

> "The UnX environment used by entrepreneurs has been designed so it can be used by an engineer, a 60 year-old or a 16 year old teenager. It is very important that the user feels safe – that is why we have a group of facilitators who guide the users through the whole process. All that is created is available to all members – it is a massive collaborative experience."
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> **Sergio Martín,** UnX professor

Lessons learned

- As an innovative learning initiative UnX has quickly understood that mobile learning is becoming central to flexible, accessible and ubiquitous learning. It is particularly important for lifelong learning, and the market for mLearning products is expanding rapidly in response to this growing demand.

- It is important to include both on-line and off-line apps to enrich the MOOC learning experience. This strategy also offers a potential way to monetize MOOCs through 'freemium'[3] apps and paid apps.

- The involvement of professors in the selection and definition of the apps connected to the MOOCs will be key to their success and the quality of the integration of mLearning into on-line education.

What's next?

The next steps will be:

- to increase the MOOC and related connected app offer
- to add new community resources
- as part of the "Learning on the Go" strategy to make UnX mobile available in developing countries and remote areas that do not have either 3G internet connections or smartphones.

This will mean adapting the platform for feature phones (simple mobile phones with no 3G) and basing the service on SMS and MMS, using voice menus, conference calls and videos through off-line audio/video files.

There are also plans to extend language options to English and offer 'unofficial' accreditation of courses, mobile badges and official academic certification in the near future.

Comment by the GSMA

Massive On-line Open Courses are a very important development in the provision of freely available lifelong education for all. They offer the potential for users to increase their knowledge and understanding. Communities of students can work collaboratively to pursue their interests. Educational content developers can develop personalised learning content. Universities can stimulate individuals' desires to continue learning and use their brand to attract future students. Mobile network operators provide connectivity. Accessing MOOCs through mobile devices also makes learning more inclusive. We will watch MOOC developments with interest, particularly in the areas of assessment and accreditation, and the development of the necessary business models to underpin such services.

"I think it is a way to access global knowledge, taught by the leaders in each area of interest. The access is easy and removes physical barriers, enabling interaction with people all around the world and allowing ideas to be spread globally. I will use everything I have learned to create new business models and find market opportunities for our research." **Sergio García,** participant

Contact

For information about UnX: Marta Caceres Piñuel, Director of Design and Project Development, CSEV: **mcaceres@csev.org**
For technical information: Raquel Fernandez, Deputy Director of Coordination, CSEV: **rfernandez@csev.org**
For general information: **csev@csev.org**

About the GSMA Connected Living programme

Connected Living is a market development initiative whose mission is to help mobile operators accelerate the delivery of new connected devices and services. Our target is to assist in the creation of 700 million new mobile connections, whilst stimulating a number of service trials and launches in the Automotive, Education and Healthcare sectors. The Connected Living programme is also working with the city of Barcelona, the Mobile World Capital, to develop and showcase smart city services. We are working in mEducation to help bring the operator and education industries together to address market barriers, foster collaboration and speed up the adoption of mobile education services.

For further information please contact us at **meducation@gsma.com** or visit **www.gsma.com**

Connected Living