



# University goes portable with tablet technology



## Developing and evaluating an Open University portable learning environment for mobile technologies

Enhanced Mobile Learning (iUOC) at the Universitat Oberta de Catalunya (Open University of Catalonia, UOC) is an initiative of the University in collaboration with mobile operator Orange Spain. It aims to take the UOC's virtual campus, My UOC, to new, interactive and portable devices.

The App is just the first step in the iUOC project; whilst it is initially just for the iPad, the project has defined a data model that can be used in any application for any device with an internet connection.

iUOC makes mobile learning a reality by providing access via Wi-Fi and 3G networks anytime and anywhere to both the student's virtual learning environment (VLE) and teaching content.

A study conducted by UOC assessed the importance of accessibility and autonomy with respect to an increase in learning productivity and efficiency. The main aim of the iUOC project was to study the learning possibilities offered by the iPad or any mobile device with 3G connectivity and a touchscreen.

The UOC Virtual Campus is already accessible from mobile devices. Students, professors and other members from UOC can log into the campus homepage via any mobile device. The mobile version provides access to the homepage, the virtual classrooms and other private areas of the main campus, allowing users to check their mail, activity in their classrooms, calendar, community forums and many other widgets without a computer but just their mobiles.

### About UOC

The Universitat Oberta de Catalunya (UOC) is an on-line learning university based in Catalonia, Spain. It has more than sixty thousand students and three thousand teachers who learn and teach through a virtual learning environment (VLE) across 50 countries. The VLE has virtual classrooms with different collaborative functionality and applications implemented in order to enable students to learn.

The UOC's mission is to provide people with lifelong learning and education opportunities. The aim is to help individuals meet their learning needs and provide them with full access to knowledge, above and beyond the usual scheduling and location constraints.

“Students and teachers evaluated the iPad positively as it can help to obtain information and, communicate with each other, and because it provides interactive support for learning.”

Llorenç Valverde, Vice-Rector, The Office of Learning Technology

### About iUOC

Orange Spain and UOC ran a pilot programme for one semester which provided iPads with 3G connections to 45 students and lecturers who accessed, via a new App, the virtual campus and the UOC’s educational materials adapted for the iPad.

The App was developed from a user-centred perspective, aiming for a minimum learning curve for the students and lecturers by making it intuitive and easy to use.

Students using iUOC are able to check their mail and diary, access educational materials, join virtual classrooms and communicate and collaborate with other students from their iPads. They have been able to enjoy a high degree of accessibility and total autonomy in managing their time thanks to mobile connectivity.

iUOC is enriching the learning experience, making use of the versatility and portability of new mobile devices. It uses RSS technology to provide a connection to the communication spaces of students and lecturers in the virtual campus, and to facilitate access to learning materials adapted for these environments and platforms.

RSS enables the straightforward and effective scaling of the MyUOC virtual learning environment for multiple devices. iUOC is supported by the MyUOC’s container of widgets for obtaining data. So, any widget supported by MyUOC can be included in iUOC. In this way the University can share data, content or services seamlessly with other applications from other vendors at minimal cost.

### Aims of iUOC

- to develop and pilot an App that provides access to MyUOC from mobile devices
- to increase the portability of the learning processes without compromising accessibility
- to explore the impact of portable learning on the UOC students, their learning and learning processes
- to explore new educational possibilities that arise from increasing the mobile access to the VLE allowing users to increase the number of brief connections they make to the virtual campus using their mobile devices
- to offer educational processes based on a model that is much less demanding in terms of time and space.



### Accessibility and inclusion

UOC is the Catalan university with the highest number of students with disabilities. One of the priorities of this project is to increase the portability of the learning processes without compromising accessibility, so all students may participate in the learning process, no matter what their requirements are.

The iPad, was chosen for this trial, not only for its high level of interactivity and portability, but also for its accessibility functionality, which makes it easier to use for people with visual and hearing impairments, and for those with physical and learning disabilities. This functionality includes a screen reader,

automatic subtitling of videos and podcasts, and more than 30 international Braille tables.

Using this functionality, and via the inclusion of the optimized mobile environment created specially for this project, it will be possible to provide services to any student or lecturer via their iPad, regardless of their functional and cognitive characteristics.

iUOC is a key initiative for the UOC, providing access not only to the content, but also to the communications spaces of its VLE via a portable and interactive device. iUOC aims to reach students that need more personalised and flexible learning processes.



# Scenario: 20-min short trip



**Xavi**  
35 years old  
Single

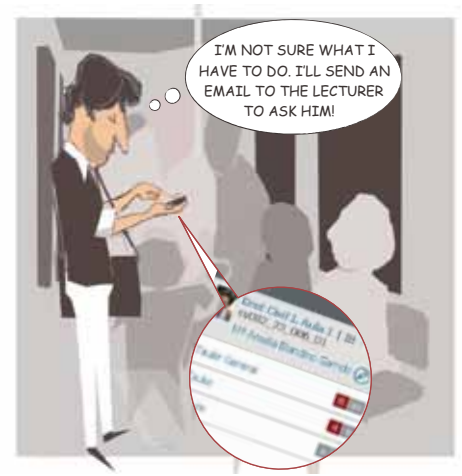
Works in accounting  
Studies Business Administration and Management  
Motivation: Enhance his career prospects



**At home:** Today is the last day to submit the assignment...



He catches the **metro every morning to work**. While he is waiting for the train...



**Once on the train,** he enters the virtual classroom. The lecturer has sent a task...



At lunchtime, **now at work**, the lecturer has already answered his email...



**Journey home:** Xavi searches for the article and uploads it to his work group...



**After dinner,** he starts to read the newspaper articles uploaded by the other students in the work group and to do the assignment.

## Conclusion

As a result of this project, students will receive a much more versatile learning experience that is in line with the richness of current technology and demands. In this way lecturers and students can have a truly customisable learning environment.

The conclusions from the analysis of gathered data indicate that iPads with 3G are a good tool for education. In addition to the iUOC's learning materials, different applications help students and teachers in their daily tasks, including reading,

visualising and fast and convenient searching for information.

Despite its many positive attributes, the study concluded that the iPad may not be the easiest tool to use for writing and creating content. However, students and teachers felt they need some kind of assessment related to the pedagogical and technical possibilities of iPad devices.

The iPad can help teachers to conceptualise new ways of designing activities in a more dynamic way, which

could involve a change in the pedagogical model. The University intends to build on the experience of enabling access to the VLE and digital content by developing interactive and subject specific native Apps. Both teachers and students stated that the iUOC App is user friendly and intuitive, and that the 3G connection, which is highly valued, facilitates the use of the iPad anytime, anywhere, which they determined was essential in order to incorporate this device in learning processes.

"Through our collaboration with UOC we are improving the learning process, making the experience more efficient, flexible and accessible to the international educational community."

**For more information:**

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The GSMA represents nearly 800 mobile operators and over 6 billion connections worldwide. 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@gsm.org](mailto:meducation@gsm.org) or visit [www.gsma.com](http://www.gsma.com)



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