



Forschungsgruppe Mobile Learning

# Mobile Learning Ray 2013

## M-UOC

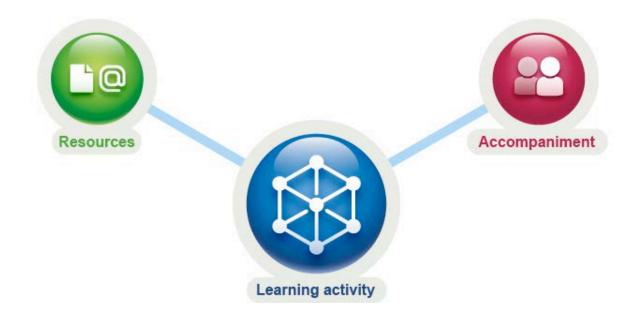
# Three Pillars towards Mobile Learning: Mobility, Multimedia and Multidevice

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> DOC Universitat Oberta de Catalunya

# About UOC (Open University of Catalonia)

- Founded in 1994 (Barcelona) as an online university.
- Fully online university using ICT as the basis.
- Educational model focused on the learning activity.



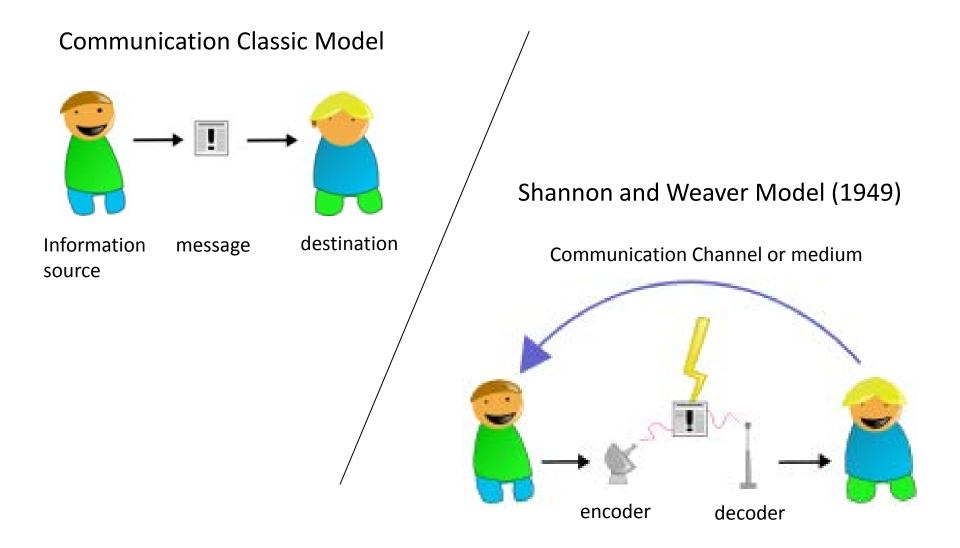
## About UOC Students

- There are many typologies of students with different ages, backgrounds, experiences, needs, desires and expectations.
- They are "on" 24x7.
- They are active participants in the learning process.
- They are overwhelmed with information.
- Asynchronous activities the most, but synchronous in some cases.
- "We are all disabled". It depends on the context and the time (at home, bus, train, car drive and other situations).

# About UOC Faculty

- Would prefer using different tools and services based on the subject taught or previous experience.
- The online environment is their only medium to teach and motivate students.
- Their "teaching" is essentially asynchronous.
- The resources they use evolve very fast.

#### **Remote communications**



# **Classic Internet based Communication**



#### Encoder/decoder Device: The Computer

#### Medium / communication channel: The Cloud

# No mobility, the device fixes the context



# The focus on the medium

Today eLearning Models



**Educational Model** 

Learning Platform

Learning Resources

Learning tools

...

Technologies and processes

Learner and faculty needs

#### But today ... Wireless and more Devices





More than a "responsive" approach Each device is a new world, research and knowledge is required



New Paradigm. Rethinking ... eLearning Models



Educational Model **?** 

Learning Platform **?** 

Learning Resources **?** 

Learning tools **?** 

Technologies and processes **?** 

Learner and faculty needs **?** 

#### **The Time Problem**

The mobile world is growing very fast, can we change the approach faster enough?



### **Mobile Learning**

#### Mobility Multimedia Multidevice



# Mobility

# More contexts, more times, more possibilities for learning and teaching



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Assignatura 2





Assignatura 1



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Notícies

Agenda

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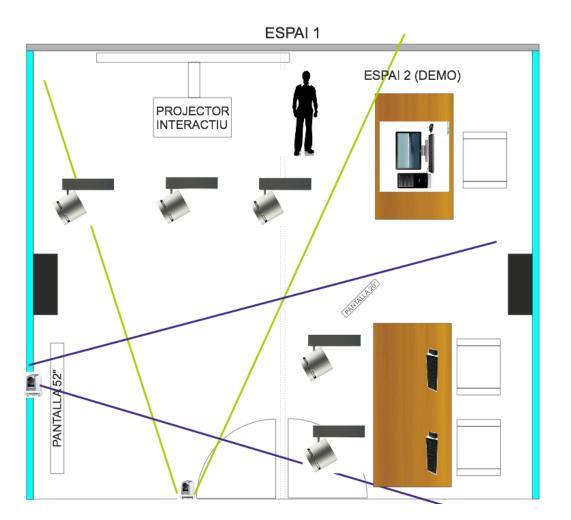
#### Multimedia

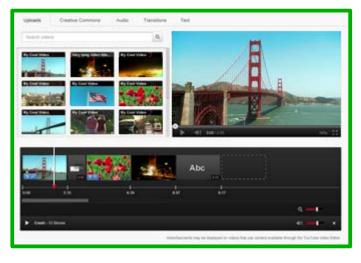
# Mobile devices. A portable and open to all multimedia studio



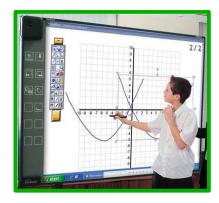
# Multimedia Room (Lab)

#### Both, physic and virtual space Video production space for learning multimedia skills

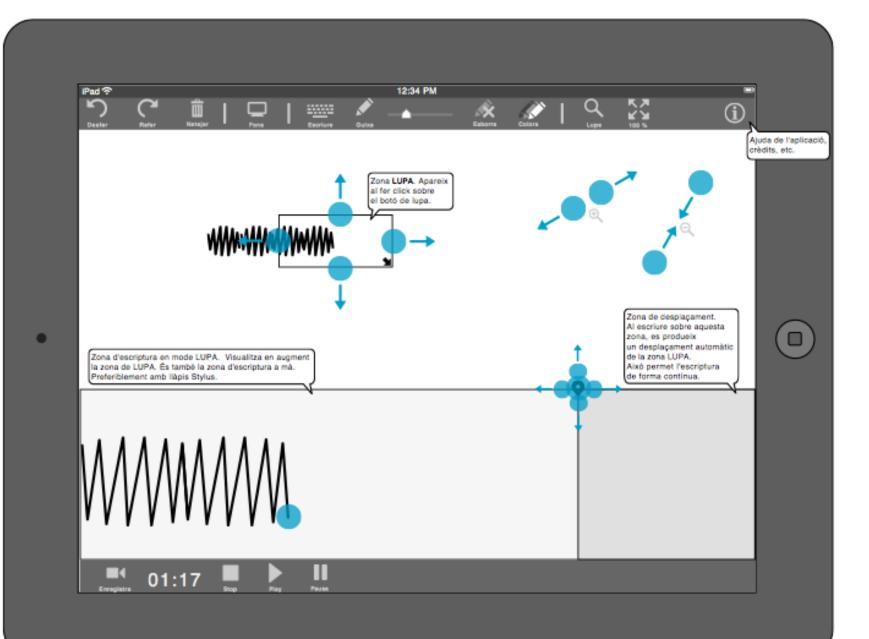






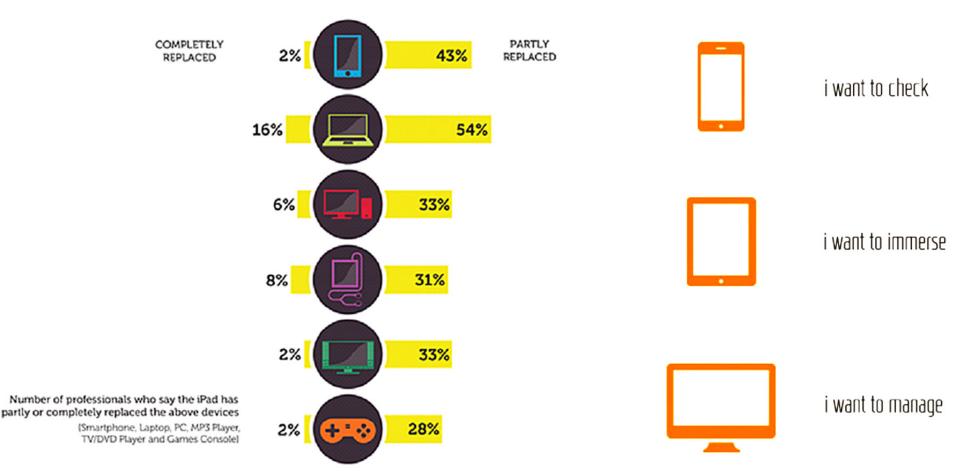


#### Guixa: https://itunes.apple.com/en/app/guixa/id586894445?mt=8



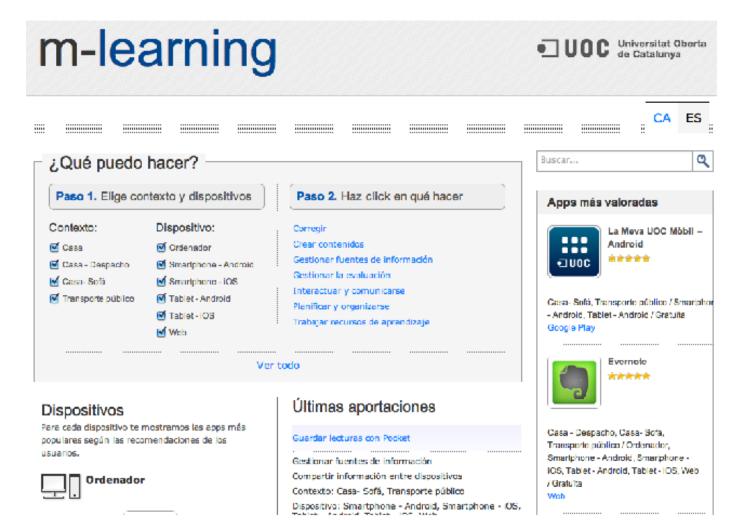
#### Multidevice

#### The combined and complementary use of devices provides more possibilities Each device, by its nature, leverages certain activities



# http://m-learning.uoc.edu

A social space for UOC students and teachers How to perform learning activities through different devices



### The paradigm

The digital world stores the physical world information



IMAGINE a world where everyday things are connected to the web and interact with PEOPLE and OTHER THINGS...

Source: http://siliconangle.com/blog/2013/06/04/

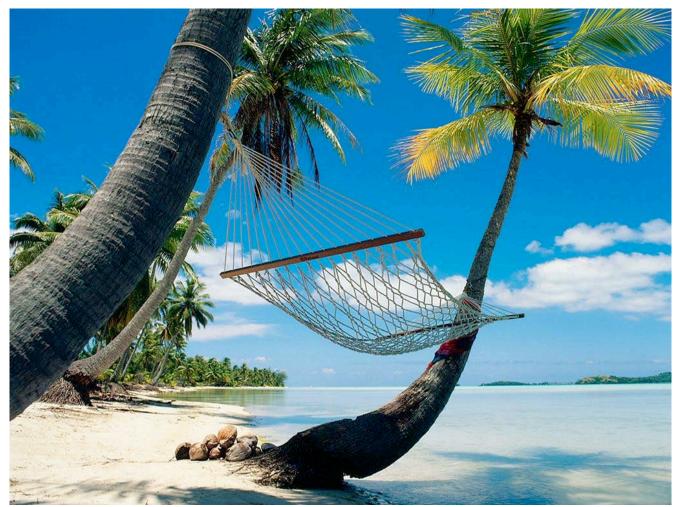
### **Today Mobile Devices**



Apple Store & Google Play are registered trademarks.

## The developers' paradise

New technologies, sensors, last frameworks, markets, ...



Source: www.picstopin.com Beach Wallpapers

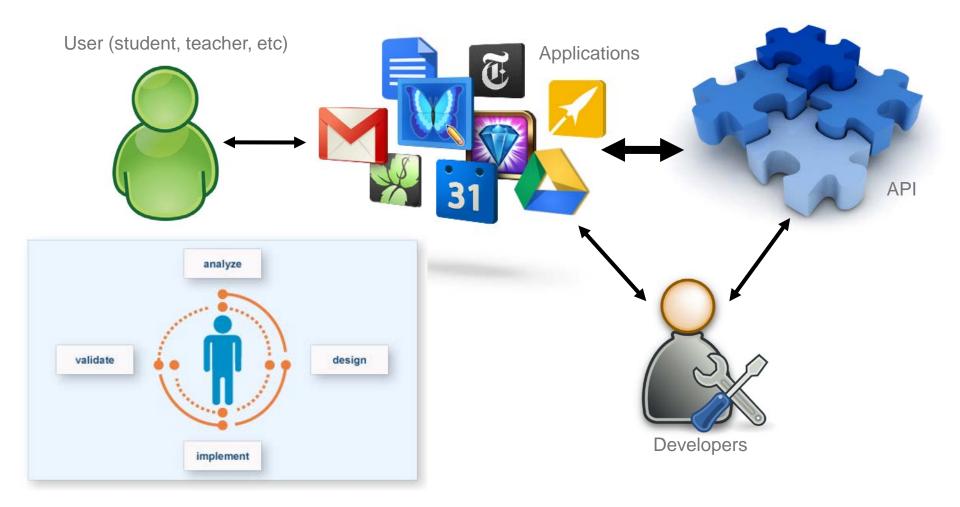
## **Ecosystem of applications**

Lots of Apps for different purposes and interacting together Dynamic: evolution, modifications, deprecation, ... Multiple authors, competition and dependencies



# eLearning. From platforms to services

Lots of Apps for different purposes and interacting together



# UOC API: http://open-api.uoc.edu

An API for integration and data Web and mobile (REST and JSON) For students, developers and researchers For managing the ecosystem and legal conditions

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#### **Open API**

El teu programa, també al Campus de la UOC amb la API

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#### Thank you! Francesc Santanach – <u>fsantanach@uoc.edu</u> Open University of Catalonia



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