

#### Main Rearch Lines and Results

Miguel Ángel Conde González mconde@usal.es



#### **Outline**



- Introduction
- Projects and Results
- Conclusions



Introduction

- Projects and Results
- Conclusions

#### Introduction (i)



- GRIAL has several research lines opened
- Each one of the projects developed must have results
- Not always results are products
  - ✓ Know how
  - ✓ Reports
  - ✓ Articles
  - ✓ Awards

#### Introduction (ii)



Different research lines = different results and products













#### Introduction (and iii)



- Some main lines of results
  - ✓ Contents adaptation
  - ✓ Mobile
  - ✓ Moodle development
  - ✓ PLE



Introduction

Projects and Results

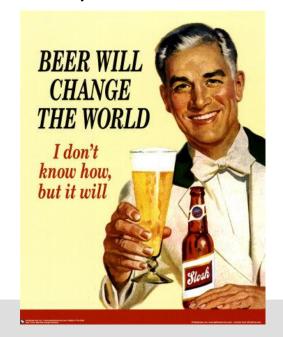
Conclusions

#### Projects & Results (i)



- Contents Adaptation to Mobile Devices
  - ✓ eLearning evolves with the evolution of new technologies
  - ✓ New contexts, new information sources, new devices

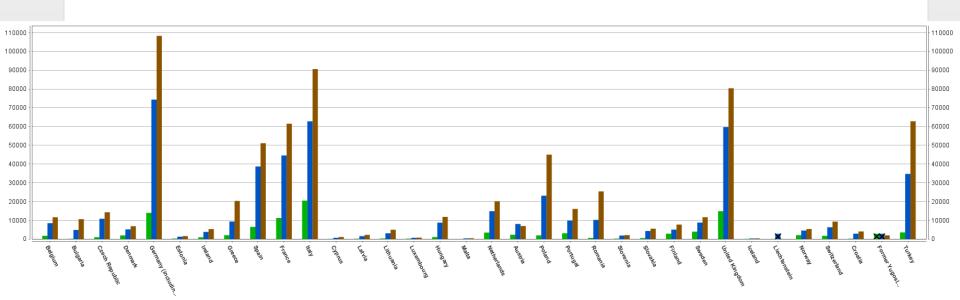




#### Projects & Results (ii)

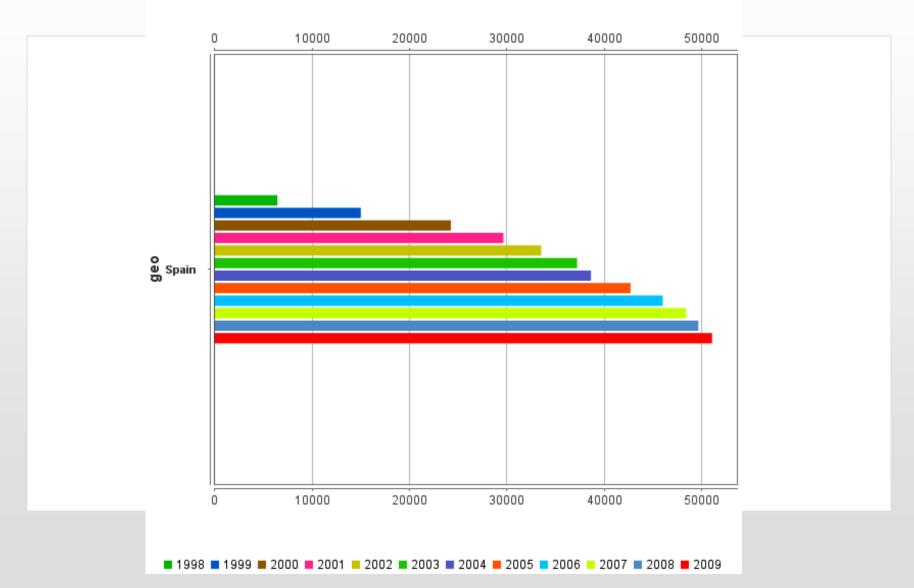


- Content Adaptation System
  - Mobile learning supporting but no replacing eLearning
  - Widely Acepted Access anywhere



#### Projects & Results (iii)





#### Projects & Results (v)



All kinds of users





#### Projects & Results (vi)



Other factors







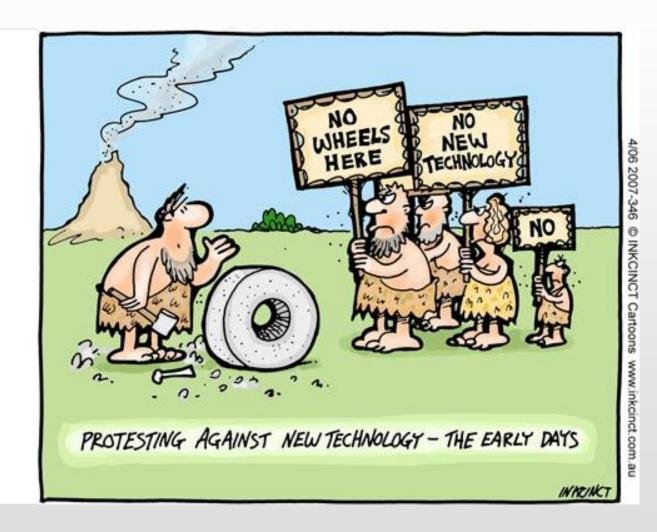




### Projects & Results (vii)



Problems



GRIAL - Universidad de Salamanca

#### Projects & Results (viii)



- Problems
  - ✓ Need of technological adaptation



✓ Need of Pedagogical adaptation

#### Projects & Results (ix)



- Adaptation system
  - ✓ What to adapt
  - ✓ How to adapt
- Adaptation of content from LMS
  - ✓ What kind of resources
  - ✓ What kind of activities
    - Consider the interaction with mobile device
    - Consider the interaction with LMS

### Projects & Results (x)



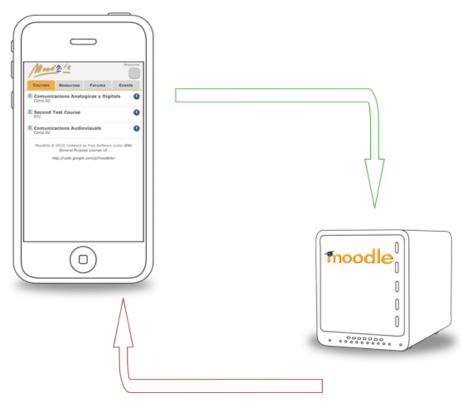
2 Final Year Project to develop CLAYMOBILE



### Projects & Results (xi)



- Other mLearning iniciatives
  - ✓ Moodbile (<a href="http://code.google.com/p/moodbile/">http://code.google.com/p/moodbile/</a>)



#### Projects & Results (xii)



- Other mLearning Iniciatives
  - ✓ Moodle4iPhone (<a href="http://iphone.moodle.com.au/">http://iphone.moodle.com.au/</a>)



#### Projects & Results (xiii)



 Mobile Project for the Escuela de Administración Pública de Castilla y León (ECLAP)



#### Projects & Results (xiv)



- PLE
  - ✓ Learning processes are continously evolving
  - ✓ Not only technological changes
  - ✓ eLearning as one of these evolutions
    - Great acceptation but less benefits than expected
    - LMS are commonly used but without expected improvements
      - LMS a space to publish courses
      - Restricted to a period of time
      - Focused on the course
      - Ignoring new initiatives and trends

#### Projects & Results (xv)



- LMS are mature enough but must evolve to avoid extinction
- New learning trends as asteroids



### Projects & Results (xvi)





# Projects & Results (xvii)



- Are LMS the only online learning Tool out there
- Are LMS in the center of the learning innovation discussion on the web
- Looks like Web 2.0 has survived its own hype, and is thriving as a concept of online activity

#### Projects & Results (xviii)

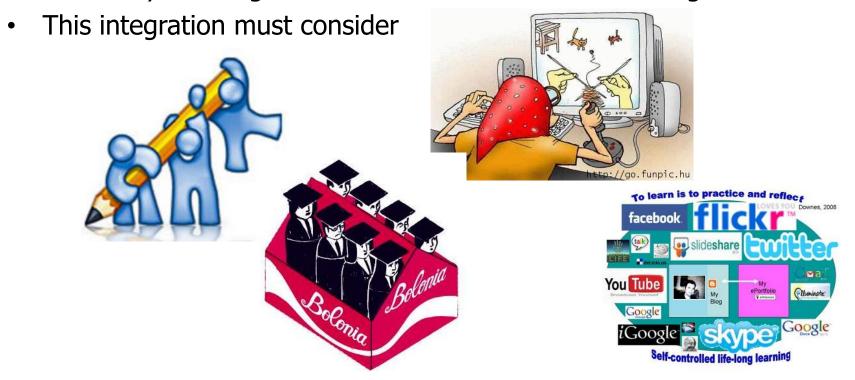


- New spaces
  - ✓ Twitter, Buzz and other microblogging
  - ✓ Platforms
  - ✓ Maps
  - ✓ Video Streaming (Youtube , Vimeo, etc)
  - ✓ Social Networks (Ning, xing, Mahara)
  - ✓ Wikipedia and other sources
  - ✓ Wolfram Alpha
  - ✓ Google docs (and clones)
  - ✓ Google wave
  - **√** ....
- Other contexts
  - ✓ Other ways to access the web
  - ✓ Game consoles
  - ✓ Mobile Devices

#### Projects & Results (xix)



- Services used for educational purposes outside the radar of learning institutions and the context of a LMS
- Integration between LMS and new trends and technology is necessary evolving towards what is known as eLearning 2.0



# Projects & Results (XX)



#### PLE

- ✓ Student-centered contexts that integrate any tool, service, content involved in eLearning process
- ✓ Some limits must be necessary in the means used by the students (iPLE)
- ✓ New trends and technologies provide benefits but also new problems
  - Improvisation in the use of Web 2.0 tools
  - Technical problems and pedagogical problems (it's easy to copy and not to create)
  - Lack of support from LMS
- ✓ PLE can solve these problems

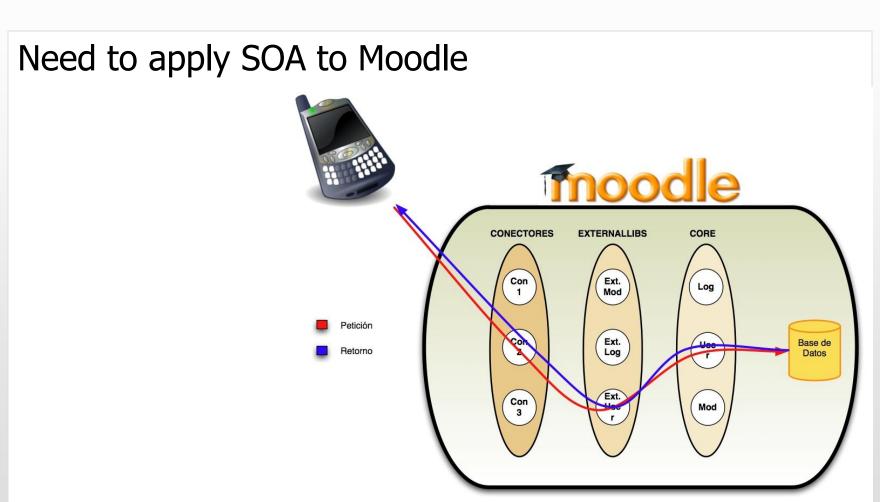
### Projects & Results (xxi)



- How to define a PLE
  - ✓ Start a solution from scratch
    - Most initiatives only integrates different 2.0 tools in a container
  - ✓ Based the new system in a existing LMS
    - Requires considering what to export and what to import in the LMS
    - Institution necessities must be taken into account
  - ✓ SOA Approach as a technological solution

# Projects & Results (xxii)





# Projects & Results (xxiii)



How to use it to define a PLE CONECTORES PLE SOAP E REST E **JSON** UWA C MOODBILE CONNECTOR IPLE LTI

# Projects & Results (and xxiv)



- Other technological projects
  - ✓ Semantic Web applied to learning environments by using layers (<a href="http://layers.com/">http://layers.com/</a>)
  - ✓ Define learning apps store for PLE

. . . .

# Projects & Results (and xxiv)



- Other technological projects
  - ✓ Semantic Web applied to learning environments by using layers (<a href="http://layers.com/">http://layers.com/</a>)
  - ✓ Define learning apps store for PLE

. . . .



- Introduction
- Projects and Results
- Conclusions

#### Conclusions



- Several types of developments with different results
  - ✓ Mobile results
    - Addaptation System, ECLAP, Moodbile, iPhone, Moodle4iPhone
  - ✓ PLE results
    - New environments
    - Net tools
    - The user as the center
  - ✓ Moodle Development
  - ✓ And so on...



#### Main Rearch Lines and Results

Miguel Ángel Conde González mconde@usal.es

