

# What our learning platforms know about the activity of our students

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# **Outline**

- 1. Introduction
- 2. Main Goal
- 3. Case Study
- 4. Results
- 5. Conclusions



# 1. Introduction

 Most universities have incorporated Learning Management Systems (LMS) to support faceto-face teaching models.

 Additionally, specific tools and services have been made available to instructors, in order to facilitate their teaching tasks.



## 1. Introduction

For example, in the Univ. Politècnica de València:

- Polimedias: a service to record and produce educational videos
- VideoApuntes: a service which makes possible the automatic video recording of lectures
- Alce: a specific web tool to generate templates for multiple choice quizzes and the automatic review



# 2. Main Goal

To use data captured by the institutional LMS:

- to know what is actually happening
- to help instructors to tailor appropriate responses



# 3. Case Study

Computer Technology (CT), a compulsory first-year course belonging to the Bachelor's Degree in Informatics Eng.

- 6 ECTS
- about 500 students
- 10 groups
- 10 instructors
- all the educational resources are posted in the course site



# 3. Case Study

- The *Statistics* tool offered by Poliformat (Sakaibased) has been used.
- Specific reports can be designed to obtain access data to:
  - a particular resource (what)
  - during a selected time period (when)
  - for a group of students (who)



# 3. Case Study

| Report Specify report title and description (required when saving/editing the report). Show |                                     |          |
|---|-------------------------------------|----------|
| What? Select activity to report.  |                                     |          |
| Activity:   | Resources                           | <b>~</b> |
| Selection:  | ☐ Limit to action: New ∨            |          |
|   | ☑ Limit to resources:               |          |
|   | ✓ 🥟 Resources                       | ^        |
|   | Material Adicional                  |          |
|   | Examenes cursos anteriores          |          |
|   | English                             |          |
|   | Examenes del curso                  |          |
|   | Objetos de Aprendizaje Polimedia    |          |
|   | Generador de Funciones              |          |
|   | Osciloscopio                        |          |
|   | Sonda del Osciloscopio              |          |
|   | Polarizacion del Transistor Bipolar |          |
|   | Puesto de trabajo de laboratorio de | *        |
|   |                                     |          |
| When? Select time period to report.   |                                     |          |
| Period:   |                                     |          |
| renou.  | Last 30 days                        | ~        |
| Select users to report.   |                                     |          |
| Users:  | Group                               | <b>~</b> |
| Group:  |                                     | <u></u>  |
| Group.  | TA-1D                               | <b>V</b> |

Statistics tool: defining a new report in PoliformaT



Different reports were created to analyse accesses to the educational resources related to the first course test:

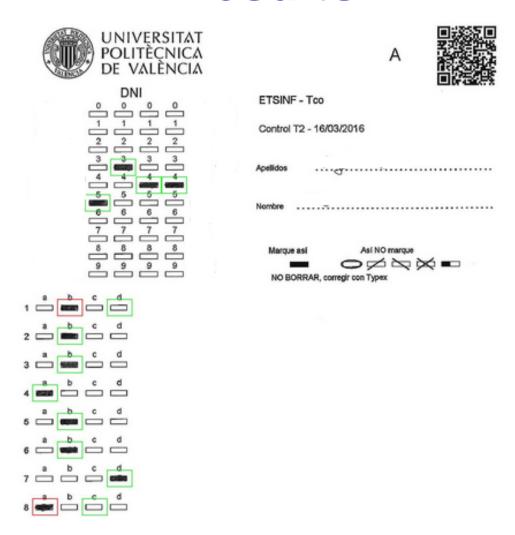
- 2 out of 53 students taking the test had previously accessed the educational video on the topic under assessment
- 66% had previously accessed the document containing the solutions to the proposed exercises for that unit (only 40% passed that test).



10 days after posting the test detailed solutions document, it can be noticed from the reports that:

- Only 52% accessed the resource. Moreover, only 56% of the students failing the test accessed it.
- Only 38% of students taking the test, accessed to the reviewed test in their drop box:
  - 55% had passed the test
  - only 28% of students failing the test accessed it





Alce tool: reviewed test



What about educational resources to reinforce critical concepts?

What about formative assessment planned by instructors?

Are we wasting our time?



# 5. Conclusions

- > This preliminary work has shown the affordances of the *Statistics* tool offered by our LMS.
  - how specific reports could be created to analyse what resources were accessed, when and by whom.
- Data collected could be used to know the online activity of the students and somehow, their attitudes in a quite objective manner.
- By combining this information with academic performance, good resource usage patterns could be generated.



# Thanks for your attention

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