NEW APPLICATION FOR CLASSROOM ATTENDANCE ASSESSMENT BASED ON NEAR FIELD COMMUNICATION

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Introduction

Bologna Process

University

Students

New teaching methods.
New assessment methods.

New challenges

Bologna Process

University

Students
Attendance evaluation, why not?

if the students attend to lectures and participate answering teacher questions or formulating their own questions and doubts, they will obtain better marks than those that usually do not attend to class or never show interest in class [4,5].

Attendance evaluation, no thanks!

*Attendance evaluation is completely useless due to the fact that it only represents a “free reward” for students.*

**But...**

*The attendance and participation assessment in the new degrees will obtain presumably, higher success ratios than subjects that do not apply these assessment methods* [6].

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Attendance control, how?

Attendance and participation has to be controlled and if should be combined with proper classroom work, like tests, questions, guided exercises, presentations, etc. But one of the first problems that arises is the attendance control itself [7].

How can a teacher control the presence of one hundred students without wasting most of the class?

A new application
So, we present a first approach in order to cope with attendance control in a feasible, reliable and fast way
Attendance control has to be:

1. Fast
2. Reliable
3. Flexible
System description

- Student identification token
- Classroom identification tag
- Central server application
Student identification token

• In order to save as much as possible in those resources, the solution proposed have been based in the students’ smartphones and Near Field Communication
Classroom identification tag

• Cheap
• Configurable
• For “in” and “out”
Attendance mobile app

- Students come in the classroom
  - They pass their mobile phone close to the «in» tag
- The app pops up
  - They choose the subject and the entrance in recorded in the LMS
- Class ends
  - They pass their mobile phone close to the «out» tag
- The app pops up
  - The exit is recorded in the LMS

- Implemented for Android 2.3.3
- The first version that supports NFC
Results

• Only beta
• Good performance
• Security problems
CONCLUSIONS AND FUTURE LINES

• Automatic attendance control to classroom can be accomplished with little resources:
  • It will help the teacher to check who attended to class avoiding annoying lists checking
FUTURE LINES

- Use of personal identification cards like the Spanish eDNI
- Teacher’s smartphone oriented application
THANK YOU.