



An Adaptive Trust based e-assessment System for Learning: TeSLA project

OVERVIEW

Webinar ENQA

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- Background
- The challenge of TeSLA
- Goals & How it works
- Teachers & students role
- Tesla figures & teachers/learners perceptions
- Recommendations

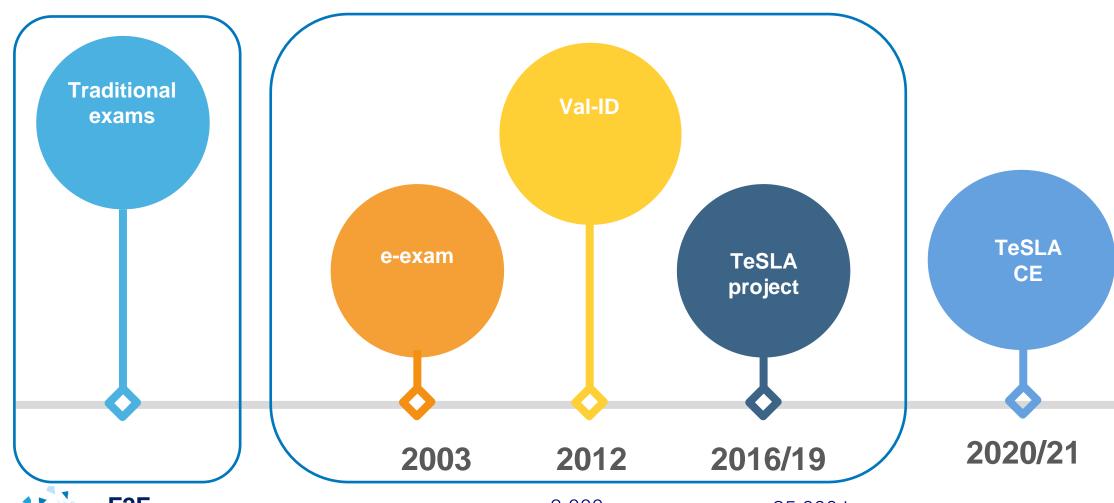


BACKGROUND



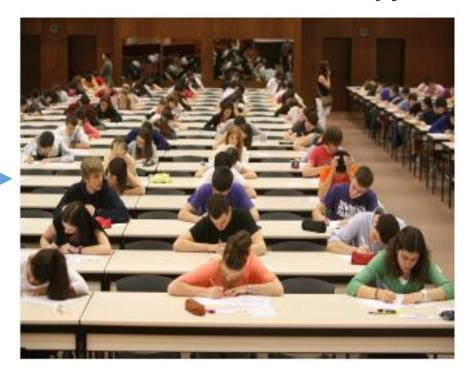
Online University since 1994

http://www.uoc.edu



Traditional exam/ assessable activity scenario

Crime_scene Trad to copy



Solution (?¿)





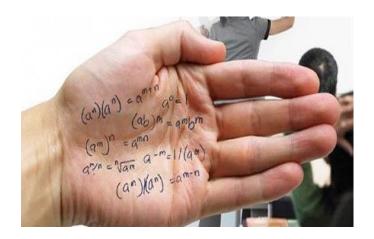


Unlimited imagination









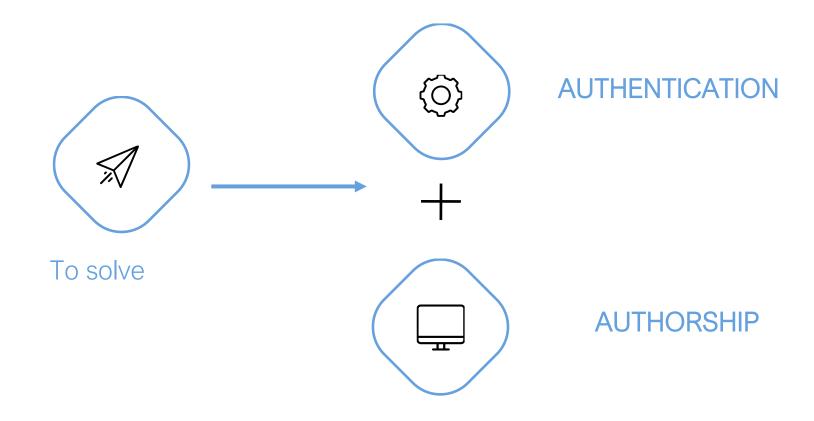




THE CHALLENGE IN E-ASSESSMENT

IT IS NOT ONLY CHEATING!

IT IS TRUST!





Authentication





Authorship







CONSORTIUM

18 Partners (130 members) + 50 external experts

8 Universities

3 Quality Agencies 4 Research Centers

3 Enterprises







































TeSLA Goals



To define and develop an e-assessment system, which ensures learners authentication and authorship in online and blended learning environments while avoiding the time and physical space limitations imposed by face-to-face examination.



TeSLA covers teaching and learning processes as well as Quality, ethical, legal and tech aspects.

- O1. Analyse and design the most appropriate learning activities for e-assessment.
- O2. To introduce tools and resources in the learning activities that capture learners' data.
- O3. Conduct several pilots and hold a set of teacher's training actions.



TeSLA Instruments (hub)

Continuous Assessment model rather than final examinations

DOCUMENT ANALYSIS

Involves the analysis of written material using a qualitative analysis package that describes discourse and its interpretation

Plagiarism tools



Analyses written material and detects similarities among various written documents



Forensic analysis

Determines the authorship verification and authorship attribution of written documents based on the comparison of current documents with stored data

BIOMETRICS

Allow the clear identification of humans based on some specific physical characteristics or special behaviour

Facial recognition



Analyses facial expressions in two stages: facial detection and recognition



Voice recognition

State-of-the-art audio description method. Speaker segmentation and cluster grouping

Keystroke dynamics



Measures how the user writes in regards to pressure and time-based measuring

SECURITY TECHNIQUES

Deploy a security service provided by a layer of communicating systems

Timestamp



Generates a sequence of encoded information identifying when an event is recorded



Digital signature

Guarantees the authenticity
of a digital message or document by
a mathematical scheme



Teacher & Student role



Teachers are who best know the content to teach, the methodology, the assessment model, but above all, how learning activities are designed in each course.

Teachers/instructors are one of the main actors in the teaching and learning process.



Learners are the other main actors. They should feel secure, not anxious.

Advantages of using the system should be very well explained as well that there are contingency plans for not disturbing them performing learning activities.



TeSLA as a whole

See video at https://tesla-project.eu/



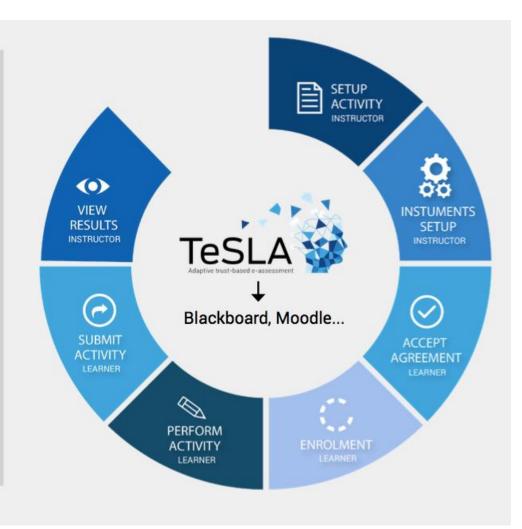
Student completes the assessment as he/she would normally do.

TeSLA may require input/interaction during the learning activity or examination to be able to complete continous analysis around identity and authorship during the test.



Analysis and value

TeSLA system will provide a report of assurance about authenticity and authorship together with the assessment responses.







Some considerations

HE Institutions

- It is an institutional decision
- Technical department ready to integrate the system
- Legal aspects about personal data
- Educational and quality aspects well worked before its use

Teachers/Instructors

- Teachers trained
- Dashboards of results well explained being aware about what is showing and how to act (institutional policy about fraud)
- Plan B (mainly in case of examinations)

Learners

- Learners informed
- GDPR
- Clear academic regulation in case of detection

Technology

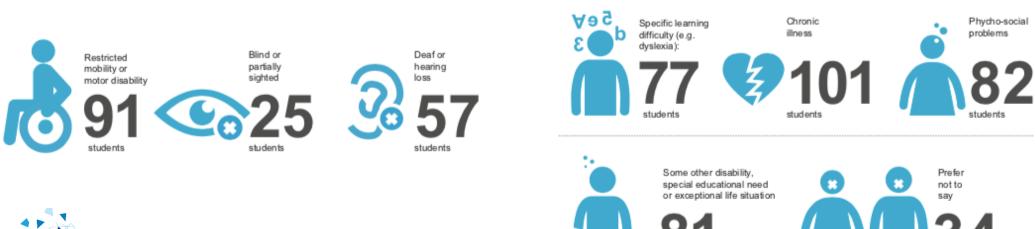
- TeSLA was thought for Continuous
 Assessment
- LTI
- Project finished December 2019
- New version ready beginning 2020



About TeSLA participants

Teachers involved 457 809 441 7 22,941 Fields of knowledge • Arts and Humanities • Engineering and Architecture • Health Sciences • Sciences • Sciences • Sciences • Social Sciences and Legal Sciences

Students with Special Educational Needs (861)



Some perceptions before COVID 19

Teachers/instructors

"It costs relatively little to integrate these activities that go beyond the traditional written format, to voice or audio format". (UOC, instructor, male, Computer Science degree)

"The use of the TeSLA system is positive, it opens a new possibility. It's an opportunity to do exams when students are at a distance. We gain in flexibility. However, it doesn't mean that all exams must be done like this. This will be just one tool more to be used depending on the course".

(UOC, instructor, male, Computer Science degree)

Students

"Something that the system offers me is flexibility. I was travelling while I had to perform the e-assessment activities. I could do it in a hotel, here and there". (UOC, student, male, Computer Science degree)

"It's positive if the UOC can use the TeSLA system to have reliable information and can validate my reputation and confirm that there's no plagiarism when I'm assessed". (UOC, student, male, Computer Science degree)



Some educational recommendations when e-assessing

- Do you need a final examination? Really? Bologna process....
- Which are the main competences to achieve?
- Think about what you need to assess
- Define how, when and why
- Select the best assessment model (CA is fine? Why not?)
- Look at several learning activities types
- Think about technology



Do a really good learning activity design!!!

Don't left learners learning behind or forgot them,



THANK YOU FOR YOUR ATTENTION!!!

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