

TALOE – Time to Assess Learning Outcomes in E-learning

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TALOE
TIME TO ASSESS
LEARNING
OUTCOMES
IN E-LEARNING



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TALOE – Time to Assess Learning Outcomes in E-learning

Promote the internal consistency of online courses by using the ALOA model (Aligning Learning Outcomes and Assessment).

Develop a web-based tool to help teachers and trainers decide on the e-assessment strategies to use in their online courses.



Questions

- ▶ *Are there practical guidelines and tools on organizational, pedagogical and technical approaches to ensure proper verification of e-learning effectiveness?*
- ▶ *Can learning outcomes acquired through e-learning be verified with proper assessment modes?*
- ▶ *Can all type of Learning Outcomes be assessed using on-line tools?*
- ▶ *How do we assess Learning Outcomes using on-line tools?*
- ▶ *Which tools can be used for each type of Learning Outcome?*



Main Concepts

- ▶ Learning Outcomes from a Qualification Framework (e.g. EQF - European Qualification Framework)
- ▶ E-Assessment methods
- ▶ Matrix of LOs / Assessment:
 - Knowledge
 - Skills
 - Competences



Main Concepts (cont')

What should be assessed?



*What do we hope
students will learn?*

*How do we know that
they have learned?*



Learning Outcomes

Learning outcomes are statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of learning.

(AHELO - Assessment of Higher Education Learning Outcomes by OECD)

*A common language,
building blocks, genetic code*



Assessment

Any procedure used to estimate student learning for whatever purpose.

(Brown et al)

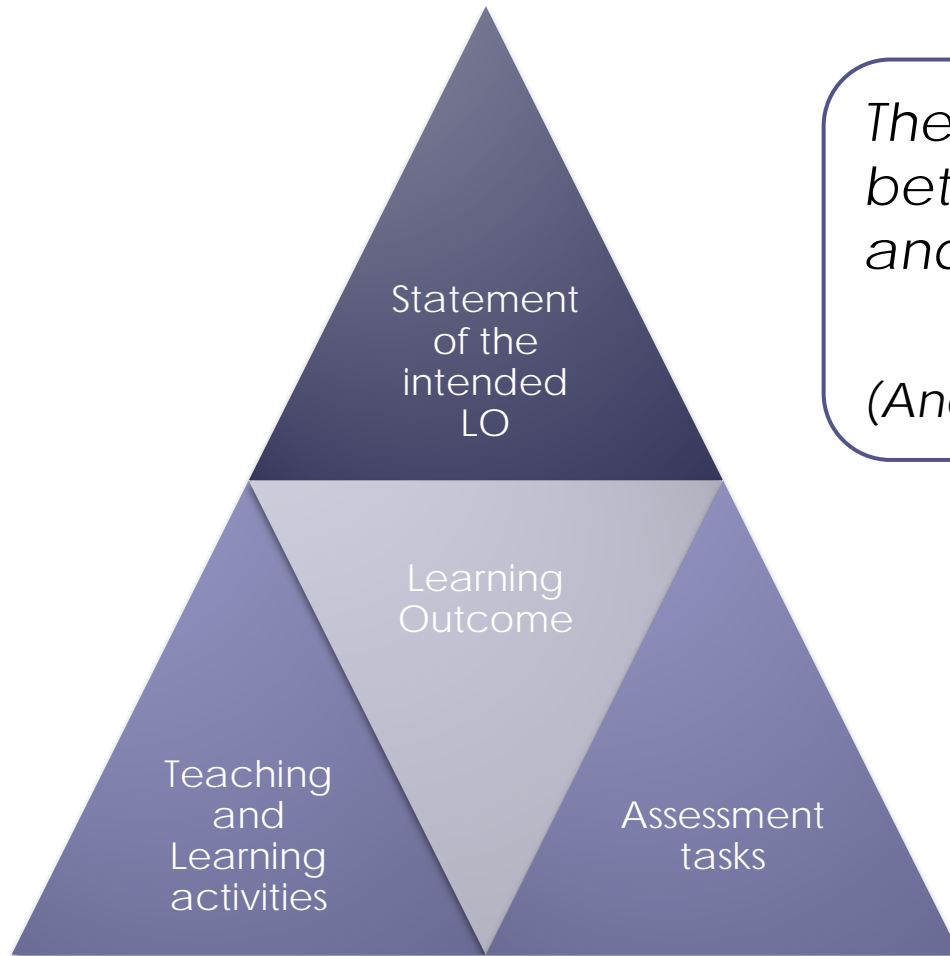
Categories of assessment

- ▶ Multiple choice questions
- ▶ Short Answer Questions
- ▶ Problems
- ▶ Essays
- ▶ Practical work
- ▶ Reflective practice

e-Assessment is the use of ICT and the Internet in particular for the assessment of learning, including design, delivery and/or recording of responses.
(JISC)



Alignment



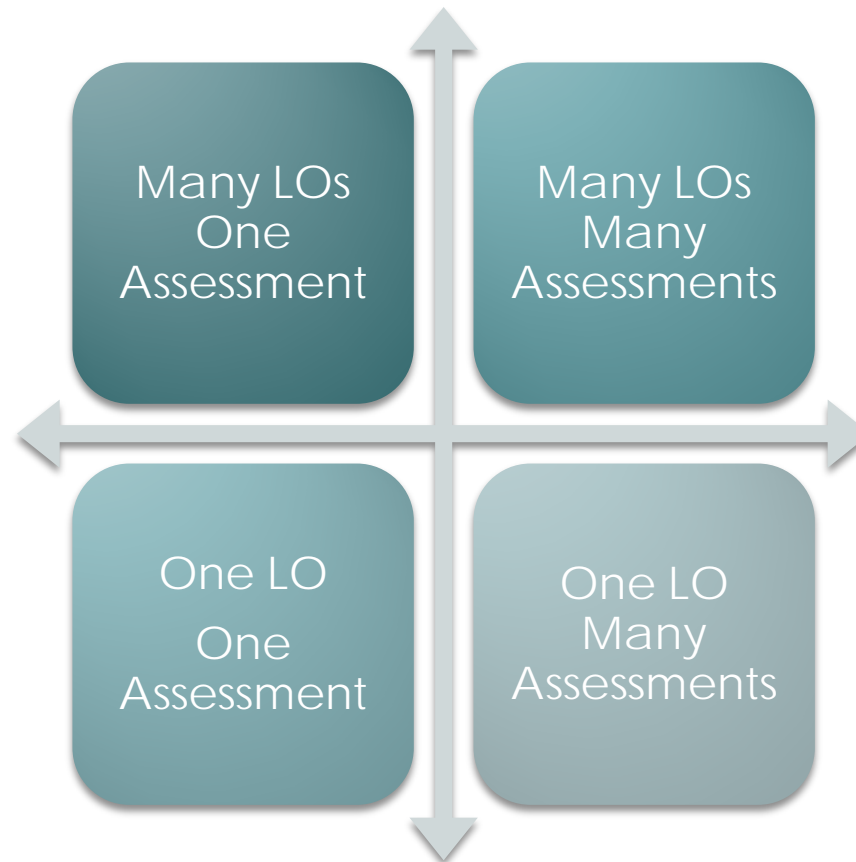
The level of correspondence between objectives, instruction and assessment.

(Anderson et al)

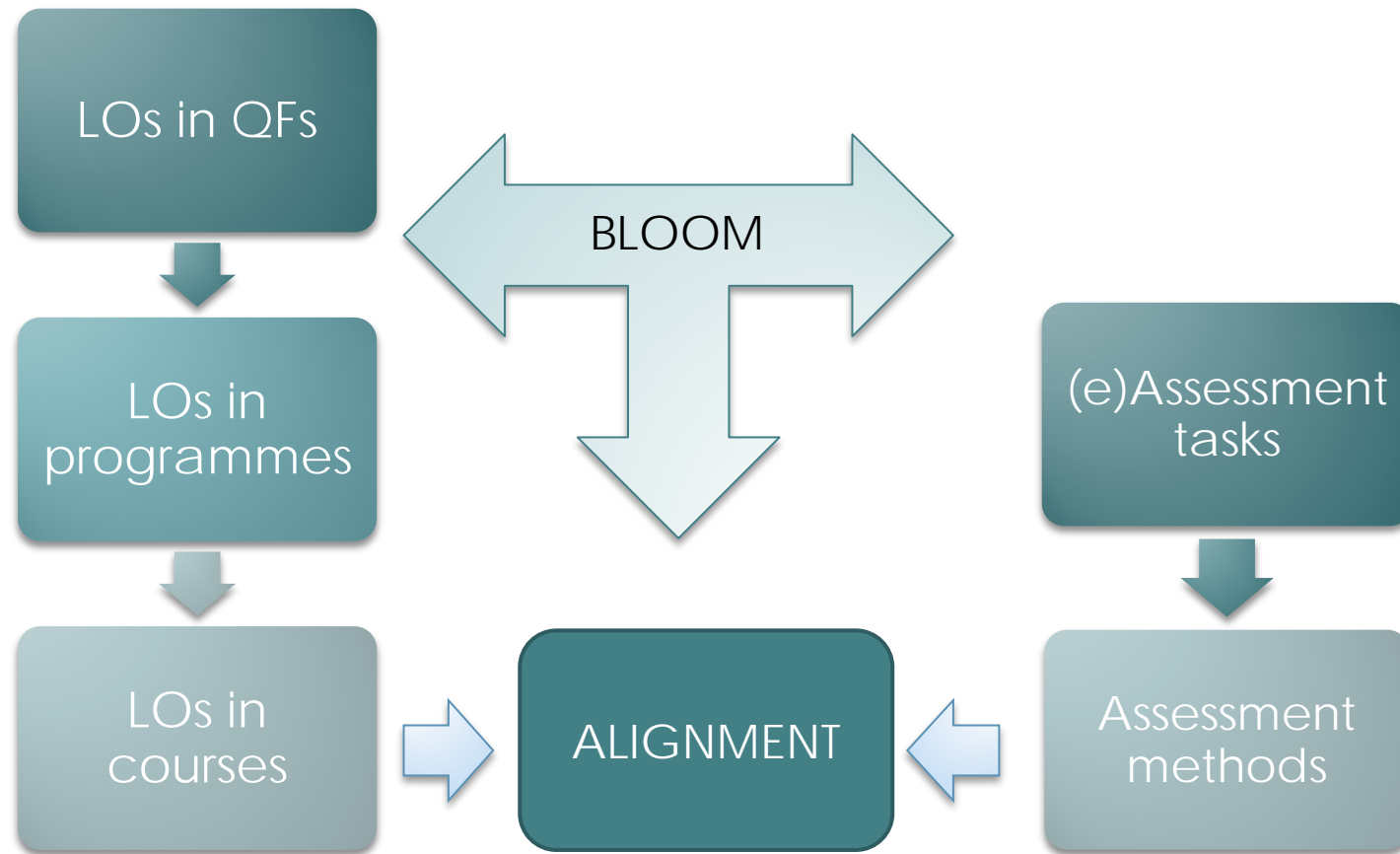


Alignment scenarios

At course level...



The ALOA Conceptual Model



Analysis of LOs with BLOOM (revised)

The student should be able to describe the main components of a personal computer.

NOUN / KNOWLEDGE

VERB / COGNITIVE
PROCESS



Bloom's Taxonomy (revised by Anderson et al)

Cognitive processes

- Remember
- Understand
- Apply
- Analyze
- Evaluate
- Create

Type of knowledge

- Factual
- Conceptual
- Procedural
- Metacognitive



Teacher with EXISTING course



- LOs statements written
- Content defined
- Existing learning activities
- Assessment strategy defined
- **Verify alignment**

ALOA



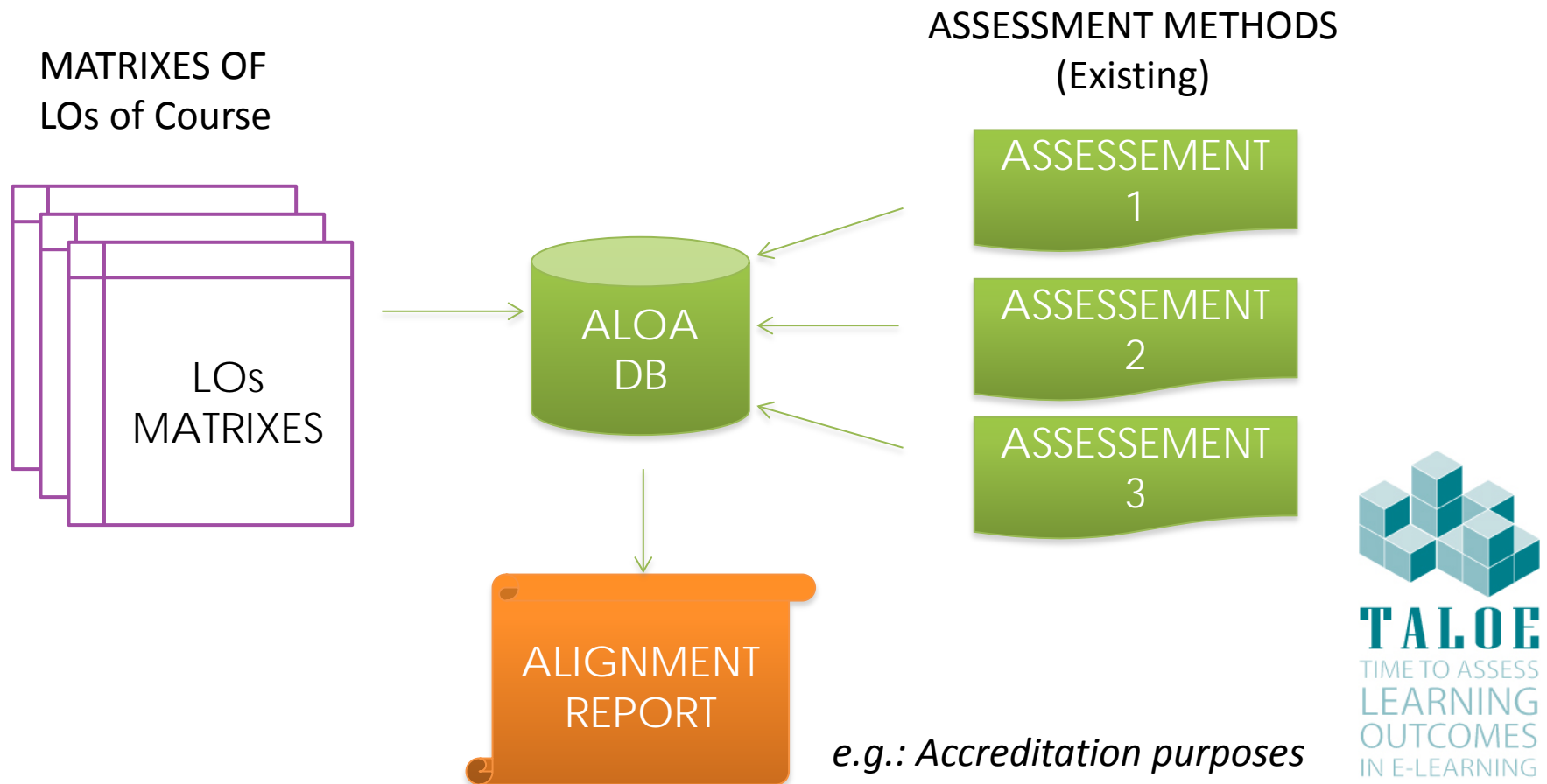
Teacher with a NEW course



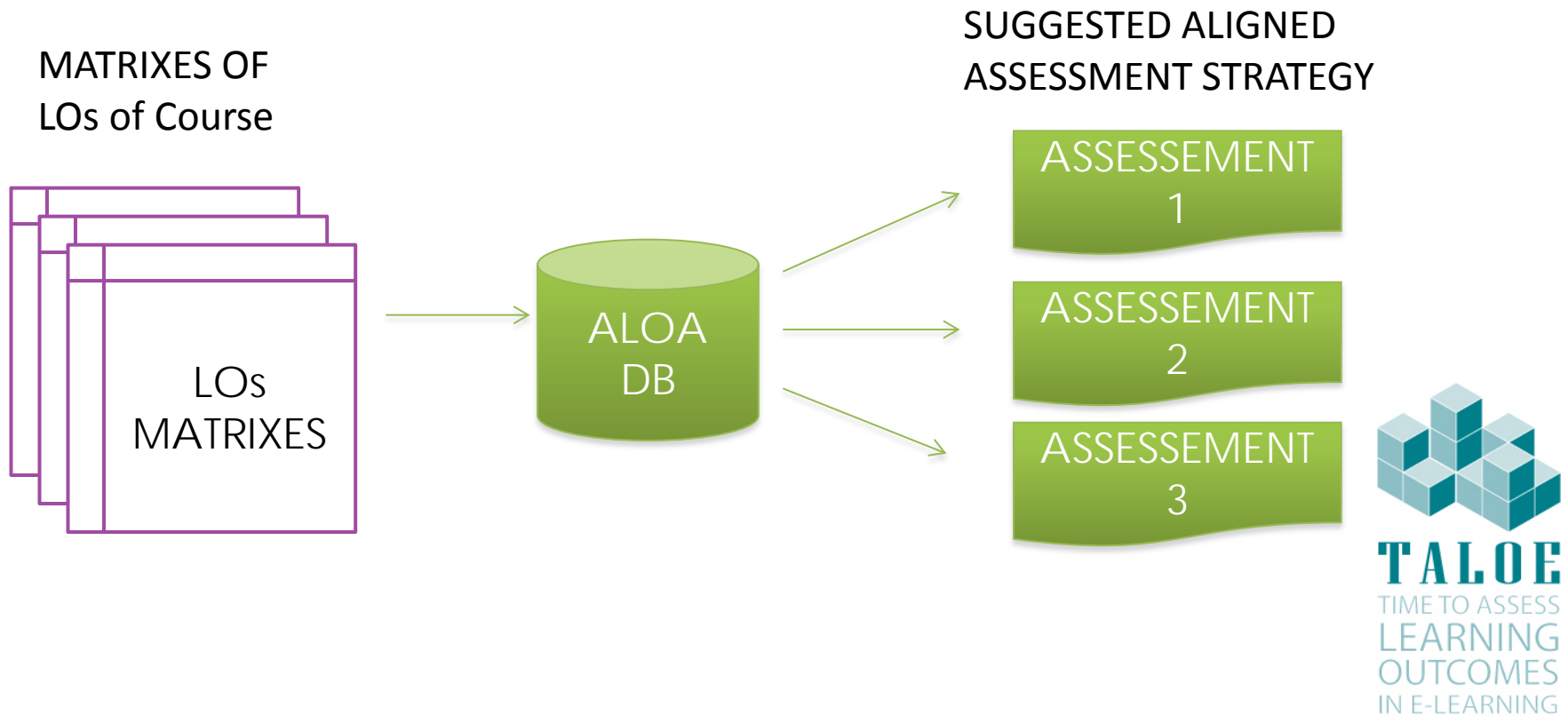
- Write LOs statements
- Define content
- Define learning activities
- **Define assessment**
- **Ensure alignment**



ALOA Engine – Verifying Alignment



ALOA Engine – Suggested aligned assessment



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- ▶ Reference No: 543097-LLP-1-2013-1-PT-KA3-KA3MP
- ▶ Two year project (01Jan2014 – 31Dec2015)
- ▶ With the support of the European Commission's Lifelong Learning Programme of the European Union
- ▶ Key Activity 3: Multilateral projects
- ▶ Project website: <http://taloe.up.pt>



Specific goals of TALOE

- ▶ Research and select innovative e-assessment practices that take advantage of the use of technology;
- ▶ Develop a web-based tool that is easy to use by the stakeholders;
- ▶ To test the implementation of the tool with real case studies;
- ▶ To distribute and disseminate the TALOE tool among the communities of stakeholders.



Current outline

- ▶ Obtained 18 case studies of e-assessment
- ▶ Develop webtool specifications
- ▶ Teachers present learning outcomes of an on-line course or module
- ▶ Webtool suggests e-assessment methods
- ▶ Test the implementation of webtool with case studies
- ▶ Distribute and disseminate the webtool





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Thank you!

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