BEST VIRTUAL SUMMIT

15 - 21 JUNE | BEYOND THE PANDEMIC

Future of Education: Online assessment: the new normal

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"Assess is a form of the Latin verb assidere, meaning "to sit with." In an assessment, one sits with the learner. It is something we do with and for the student, not something we do to the student."

— G. Wiggins, cited in Joan Green, 1998, Authentic Assessment: Constructing the Way Forward for All Students

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Online

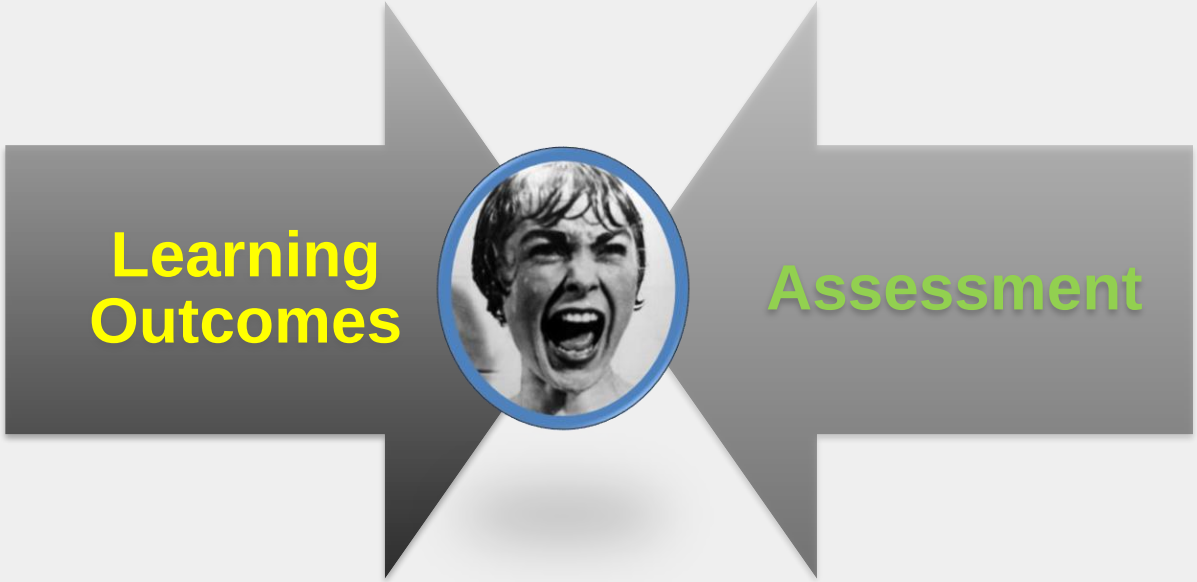
- **Student:** Success.
- **Teacher:** Compliance.
- **Society:** Assurance.

TALOE – Time to Assess Learning Outcomes in E-learning

What do we hope students will learn?

How do we know that they have learned?

Simple problem…?



The first step is to de ning Outcome

About TALOE Webtool | Ask for Assessment Advice | Writing Learning Outcomes | Assessment Methods | Case Studies | Help

Ask for Assessment Advice

Step 1: Choose the learning outcome you want your students to achieve. You can write the learning outcome in the box bel

Insert the descripton of Learning Outcome here

Step 2: Please select from one or more of the tabs below the verb or the verbs (maximum 3) that better describes the Learning Outcome:

Remember	Understand	Apply	Analyze	Evaluate	Create

- [ ] Recognizing – Locating knowledge in long-term memory that is consistent with presented material
- [ ] Recalling – Retrieving relevant knowledge from long-term memory

Check assessment methods

CALOHEE: Learning outcomes, teaching, learning assessment (www.calohee.eu)

Examples

Dimension 1: Knowledge and Understanding			
(Sub)descriptor / TLA approaches	*Knowledge*	*Skills*	*Autonomy and Responsibility (Wider Competences)*
L6_1. Level descriptor	**K6_1** **Demonstrate knowledge and understanding of mathematics as well as sciences and engineering disciplines underlying civil engineering specialisation at a level necessary to achieve the other programme outcomes.**	**S6_1** **Apply knowledge and understanding of mathematics as well as sciences and engineering disciplines underlying civil engineering specialisation to solve / design / investigate / conduct complex civil engineering problems / products, processes and systems / issues / activities.**	**C6_1** **Identify knowledge and understanding of mathematics as well as sciences and engineering disciplines underlying civil engineering specialisation necessary to solve / design / investigate / conduct complex civil engineering problems / products, processes and systems / issues / activities.**
Subset 1 L6_1.1 **Mathematics**	K6_1.1 Define and describe key factual information and problem-solving processes related to mathematics through differential equations.	S6_1.1 Solve / design / investigate / conduct civil engineering problems / products, processes and systems / issues / activities using and applying knowledge and understanding of mathematics through differential equations.	C6_1.1 Identify knowledge and understanding of mathematics necessary to solve / design / investigate / conduct civil engineering problems / products, processes and systems / issues / activities through differential equations.
Subset 2 L6_1.2 **Sciences underlying civil engineering specialisation**	K6_1.2 Define and describe key factual information and problem-solving processes related to calculus-based physics and chemistry.	S6_1.2 Solve / design / investigate / conduct civil engineering problems / products, processes and systems / issues / activities using and applying knowledge and understanding of calculus-based physics and chemistry.	C6_1.2 Identify and justify knowledge and understanding of calculus-based physics and chemistry to solve / design / investigate / conduct civil engineering problems / products, processes and systems / issues / activities.
Subset 3 L6_1.3 **Engineering disciplines underlying civil engineering specialisation**	K6_1.3 Define and describe key factual information and problem-solving processes related to engineering disciplines underlying civil engineering specialisation being aware of the forefront of civil engineering specialisation and of the wider multidisciplinary context of engineering.	S6_1.3 Solve / design / investigate / conduct complex civil engineering problems / products, processes and systems / issues / activities, using and applying knowledge and understanding of engineering disciplines underlying civil engineering specialisation.	C6_1.3 Identify knowledge and understanding of engineering disciplines underlying civil engineering specialisation necessary to solve / design / investigate / conduct complex civil engineering problems / products, processes and systems / issues / activities.
Assessment approaches	Short Answer Questions Multiple Choice Questions Essays	Essays Problem Solving Practical Work	Problem Solving Practical Work Reflective Practice Assignments
Learning approaches	Attending lectures Attending seminars Attending tutorials Participating in flipped classroom Blended learning	Participating in exercise courses/ practical classes Preparing and making oral presentations Researching and writing papers, reports, dissertations	Participating in exercise courses/ practical classes Problem-based learning Design-based learning

Examples

- Eportfolio: Assessment for a better learning (https://teaching.berkeley.edu/resources/assessment-and-evaluation/design-assessment/e-portfolio)

“E-Portfolio
An electronic porfolio (e-portfolio) is a purposeful collection of sample student work, demonstrations, and artefacts that showcase student's learning progression, achievement, and evidence of what students can do. The collection can include essays and papers (text-based), blog, multimedia (recordings of demonstrations, interviews, presentations, etc.), graphic.
Portfolios are considered as a learning and assessment tool
Student Learning: E-portfolio has been used to facilitate, document, and archive student learning. It is a learning tool for students to clarify their educational goals, integrate and solidify learning through reflection, and showcase achievement to potential employers. By having students reflect on what they learned, how they learned it, and how much they learned, they start to take control of their own learning. As Paulson and Paulson (1991) said, “portfolio is a laboratory where students construct meaning from their accumulated experience” (p. 5). As students select their representative work and reflect on what they learned, they start to make sense of their educational experiences in various courses and derive new meaning out of the process (Banta, 2003).”

Examples

- EDEN: How to design and manage assessments for online learning (http://www.eden-online.org/how-to-design-and-manage-assessments-for-online-learning/)

One of the more urgent questions facing educators today is: How do I manage assessment in online learning environments?
In the next webinar of EDEN's Education in a Pandemic Series, we'll be tackling this question and others related to the topic of online assessment. For example, how do we ensure academic integrity? How can we ensure that our students aren't cheating? What measures can we put in place to ensure learning is happening and to assess it effectively?

Behaviour: Experience in China

https://www.techspot.com/news/74719-chinese-school-using-facial-recognition-analyze-students-emotions.html

Future

- When it comes to using facial recognition technology in surveillance systems, China leads the way. Now, one of the country's high schools is utilizing the technology to monitor students' facial expressions, letting teachers know what emotions the kids are experiencing.

- The Hangzhou No. 11 Middle School is trialing the tech as part of its "Smart Classroom Behaviour Management System." The three cameras placed above the blackboard analyze pupils by scanning them every 30 seconds and determining if they're happy, confused, angry, surprised, fearful, or disgusted. They are also designed to log six types of student behaviors: reading, writing, hand raising, standing up, listening to the teacher, and leaning on the desk.

AI and learning: Teaching Commons

https://teachingcommons.stanford.edu/resources/teaching/evaluating-students/assessing-student-learning/artificial-intelligence-assessment

Future

"In AI assessment, a software system infers problem-specific rules for automated scoring from examples of instructor grading of student assignments.
Initially, AI techniques are applied to learn how an instructor grades a problem. The instructor evaluates a sample set of student responses, and the system creates a computer model incorporating rules it inferred about the instructor's grading decisions. The model is then used to grade other students' work.
The strengths of AI assessment are efficiency, consistency in applying the same criteria across students, and immediate and detailed feedback on performance.
Today, AI assessment is most useful as one part of an assessment process and for enhancing learning, rather than making final, authoritative, high-stakes decisions about student performance. Key considerations are sufficient transparency of the rules applied, human scoring establishing the validity of machine-generated scores, and ongoing quality control."

Future

- Data and communication with learners can improve education.
  - Universal
  - Accessible
  - Dialogue
  - Information
  - Personal

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THANKS!

Do you have any questions?

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