

DEFINITIONS/ DESCRIPTIONS OF THE TEACHING METHODS MENTIONED IN THE QUESTIONS OF THE TEFSI SURVEY

E-learning - a general term covering different methodologies of learning that are wholly or partly based on digital learning tools.

Intended Learning Outcomes (Meta-ILO's, Hidden ILO's) - intended learning outcomes represent competences attained by students instead of topics to be covered, the latter being typically the purpose of a syllabus. The adoption of the outcome-based approach implies a change in perspective from 'content' to 'knowledge, skills and competencies achieved by students'. Intended learning outcomes can be defined for courses or a cluster of courses (meta-ILO's) or specific for one lecture, an activity or an assignment. Hidden ILO's cover a learning outcome that is not revealed to the students until after the activity has taken place. The purpose is that the knowledge of the hidden ILO might hamper the reflections and learning of the specific competency that is described in the hidden ILO.

Constructive alignment in course designs - constructive alignment requires that your learning outcomes are aligned to a learning activity, and that the learning activity is appropriately reflected in the assessment. This means that students learning is tightly anchored to take necessary learning to be acquired during the lesson or course, and that the students are therefore assessed on this same learning. In this way, learning potential is maximized.

Flipped class room - a flipped classroom is an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering instructional content, often online, outside of the classroom. It moves activities, including those that may have traditionally been considered homework, into the classroom.

Video lectures/screencasts/pencasts – Video lecture can be a video recording of a lecture or a coupled with existing video material that needs some further elaboration. Screencast is a video recording of your screen (e.g. slides), typically with a voice-over presentation. You can use it to demonstrate and teach the use of software features, as an online video lecture, or to

give video feedback on assignments and more. Pencast is a recording of your writings or drawings, typically with a voice-over, where you explain your formulas, equations, words etc.

Pre-course quizzes - are a non-graded assessment tool used to determine pre-existing subject knowledge or to have students reflect on their own competences towards a subject before a course. Typically pre-tests are administered prior to a course or activity to determine knowledge baseline, but here they are used to test students prior to topical material coverage throughout the course or to test safety issues before a lab course.

Student response systems (clickers) - is a set of software that facilitates teaching activities. In order to actively involve all individuals of a group of students during class, you can ask questions by means of personal response systems. Students are able to respond simultaneously and individually with digital, laptops, or mobile devices. Each individual is challenged to formulate an answer to the question, to think about the course material, which can lead to a better understanding of complex concepts or knowledge consolidation. Student response systems are often used in conjunction with flipped classroom to establish the progression of the material covered by the lecture. Of the majority of the students answer a certain question correct, the teacher can advance to the next topic.

Student reflection by performing quizzes - regularly scheduled quizzes on reading material, which may increase completion of reading assignments and thereby knowledge consolidation and course performance.

Video's/notes to be shared - to teach effectively with and through video.

Group work processes (competence mapping, contracts, Belbin roles, project management tools) - competency mapping tool is a process of identifying key competencies of each student in a group (e.g. a study group) and incorporating those competencies throughout the various processes of a project or an assignment. A competency can be defined either as a behaviour (i.e. communication, leadership) or a skill or ability; Belbin's "team roles" are based on observed behaviour and interpersonal styles - when a team is performing at its best, you'll usually find that each team member has clear responsibilities. By identifying roles you can both avoid conflicts but also uncover important roles, that might not be present in the group; group contracts – group contracts can be used as a tool to make a group reflect on level of

ambition, workflow, meetings, conflict handling, etc. The contract might not be important as such, but the reflections and discussion leading up to the creation of the contract is important; project management tools – tools that can facilitate the process of a project or assignment. Project management tools are typically online or app based and holds features of ‘to do lists’, meetings, file handling, and communication.

Student video project – students create videos as a tool for enhancing their learning experience. For example, a as part of their grade assessment or as an optional extra credit assignment. Is can also be to produce instructional videos for laboratory equipment or other procedures, interviews, or conveying learning in different forms (news broadcast form, social media, speeches, etc.).

Innovative feedback (peer-to-peer discussions/feedback, video feedback, rubric models) -
peer-to-peer discussions - training students to give each other constructive feedback in a way that is constructive and helpful; video feedback - individualised video recordings of the lecturer discussing each assignment; rubric models – using rubrics for grading any type of assignment: teachers can create a rubric of their own or adopt one of the several already-published rubrics available and grading student work using the rubric by clicking the appropriate description on the screen.

Learning Analytics - measurement, collection, analysis and reporting of data about learners and their contexts, for the purposes of understanding and optimizing learning and the environments in which it occurs. Learning analytics can take a variety of forms including dashboards, recommender systems, predictive analytics, and alerts/warnings/interventions.

Competitions - system of competition between different groups of students.

Progress badges - digital badges are used as a marker of achievement, unify the learning and can show a progression of learning experience, indicate pathways to learners, and more clearly demonstrate achievements to an external audience.

Learning Management Systems (LMS) - LMS technology, is typically an online multipurpose platform which can support teaching and learning activities, can help to make teaching more effective, revision more straight forward and assessment easier to administrate.

Gamification (Alternate Reality Games [ARG]) - ARG consists of a series of challenges, which take place both online and offline, individually and in groups. Have valuable pedagogical characteristics, e.g., being social and inclusive, stimulating counterfactual thinking, and supporting student autonomy.

Collaborative learning – the instructional use of small groups so that students work together to maximize their own and each other's learning, offers real learning opportunities for students to develop self-critical thinking, to achieve valuable interpersonal and team skills, scaffold learning, and participate in task-oriented learning groups.

Virtual Reality/Augmented Reality - virtual reality is an artificial, computer-generated simulation or recreation of a real-life environment or situation. It immerses the user by making them feel like they are experiencing the simulated reality first-hand, primarily by stimulating their vision and hearing; augmented reality is a technology that layers computer-generated enhancements atop an existing reality in order to make it more meaningful through the ability to interact with it. AR is developed into apps and used on mobile devices to blend digital components into the real world in such a way that they enhance one another, but can also be told apart easily.

Opponent tasks - learning through debate during problem-based learning. It can be used as a group discussion based on predefined questions, in conference-like settings where students ask questions to a speaker, or in a 'devil's advocate' situation where students can ask critical questions linked to a certain belief or interpretation of a problem.

Case based learning with external companies/organisations - engages students in discussion of specific scenarios that resemble or typically are real-world examples. This method is learner-centred with intense interaction between participants as they build their knowledge and work together as a group to examine the case. The instructor's role is that of a facilitator while the students collaboratively analyse and address problems and resolve questions.

Media platform learning (podcast, blogs, vlogs, speech, political statements, debates) - digital learning platforms for students, for debate and discussion. Typically, the students are asked to convey a complex subject in layman's language or to use knowledge as a setpoint for an opinion.