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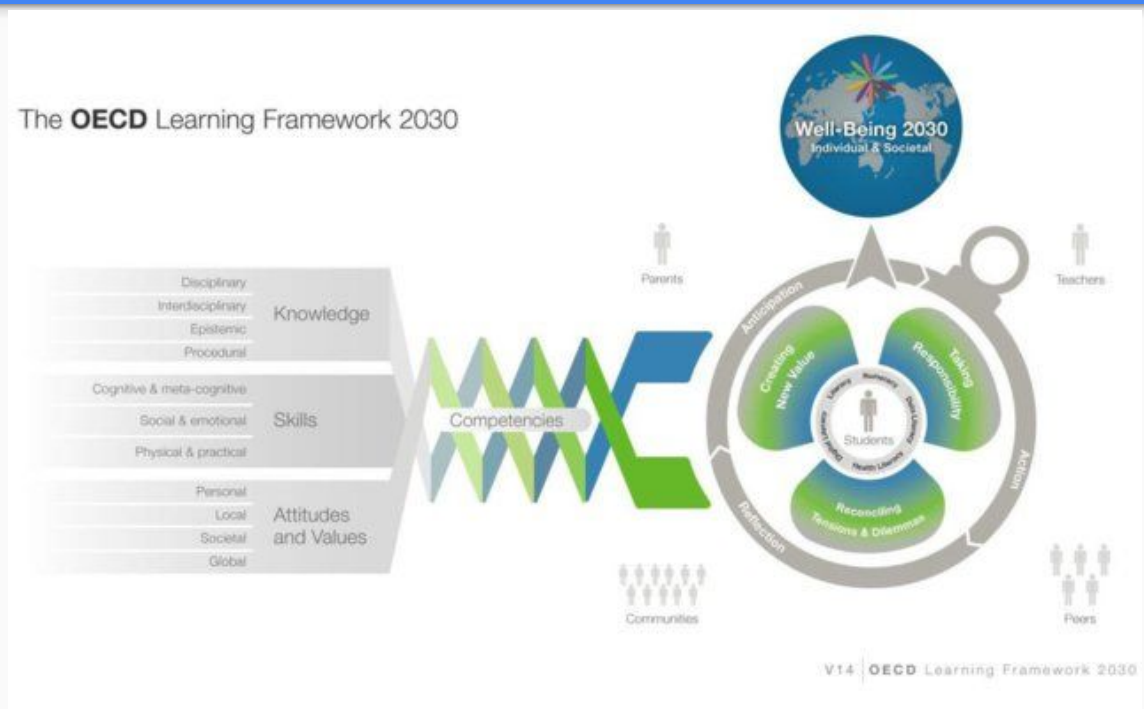
DigiProf project

Assessing knowledge, skills and values/responsibilities

DigiProf



The OECD learning framework 2030



Source: OECD. (2018). *The Future of Education and Skills: Education 2030 - The future we want*. OECD Publishing, p. 4.

Why assess knowledge, skills and values/responsibilities?

The development of **competences** involves the mobilisation of **knowledge**, **skills**, and **values/ responsibilities** to meet complex demands.

- **Knowledge assessment.** It is becoming more and more relevant to assess the extent to which students construct new knowledge integrating it with prior knowledge. This can be achieved through the development of activities that imply reasoning, as well as analytical and critical thinking.
- **Skills assessment.** The assessment of skills assessment allows for determining an individual's strengths and weaknesses. Its main purpose is to identify the students' gaps and adjust learning activities accordingly, but also to highlight the students' strong points and capitalise them for the development of other learners.

Why assess knowledge, skills and values/responsibilities?

- **Values/ responsibilities assessment.** Values determine the behaviour of individuals and refer to the beliefs that motivate them to act a certain way. In educational context, it is particularly relevant to develop and assess: i) **personal values**, which individuals consider to be most important and exhibit in their daily lives (e.g., creativity, humility, integrity, compassion, selflessness or friendship); ii) **relationship values**, which reflect in the individuals interaction with the other (e.g., trust, generosity, empathy and intercultural communication); and iii) **societal (or global) values**, which refer to how individuals relate to society (e.g., environmental awareness and accountability, fairness, dignity, individual rights, community and social responsibility).



How to assess knowledge, skills and values/responsibilities?

- There are several possibilities. Options to consider may be:
 - **Team-based learning (TBL)**
 - **Challenge-based learning (CBL)**
 - **Collaborative Online International Learning (COIL)**



How to assess knowledge, skills and values/responsibilities?

- **Team-based learning (TBL).** Team-based learning involves a sequence of activities that include individual work, team work, and immediate feedback. It implies the student's individual pre-class preparation, followed by a test, which is answered twice by the students, firstly in an individual setting (iRAT) and then in a group setting (tRAT).

Rinaldi, M. (2020). [What is team-based learning? 4 ways it can help your group activities.](#)

How to assess knowledge, skills and values/responsibilities?

- **Team-based learning (TBL):** iRAT & tRAT

Tests can aim at checking the **lowest level of cognitive abilities**, i.e. to determine the ability to **repeat, remember, describe**.

students must choose the correct answer or mark selected features of one or another phenomenon or concept

- Yes/No or True/False
- Short answer (to be recorded)
- Select missing words from drop-down lists
- Drag and drop
- Matching
- Multiple choice

How to assess knowledge, skills and values/responsibilities?

- **Team-based learning (TBL): iRAT & tRAT**

Tests can also be used to complete **complex knowledge and skills assessment tasks**.

↑
Questions that allow students to **apply their critical thinking and higher cognitive level abilities (synthesis/ analysis, evaluation and creativity)**



- close-ended questions
- open-ended question (essay), where students are able to write their own insights (even though templates can be provided);
- other formats allow you to choose several correct answers, recognizing features, statements, etc.

How to assess knowledge, skills and values/responsibilities?

- **Team-based learning (TBL): iRAT & tRAT**

Tips to use Moodle's multiple choice with justification question type

- Formulate clear questions
- Use "delayed feedback" to provide an explanation - it can be automated or personalised
- Require justification to better understand the student's choice

5
Neatsakyta
Klausimo vertė:
1.00
Pažymėti klausimą
Redaguoti klausimą

Ar tai yra dalyko struktūros tipai Moodle aplinkoje?

Klausimų ir atsakymų forumas

- ✓ Standartinis forumas
- Standartinis forumas tinklaraščio formatu
- Viena diskusija kiekvienam
- Vienos diskusijos forumas

Pasirinkti vieną:

- Taip
- Ne

Pakomentuokite savo pasirinkimą

Pastraipa B I

Kelias: p

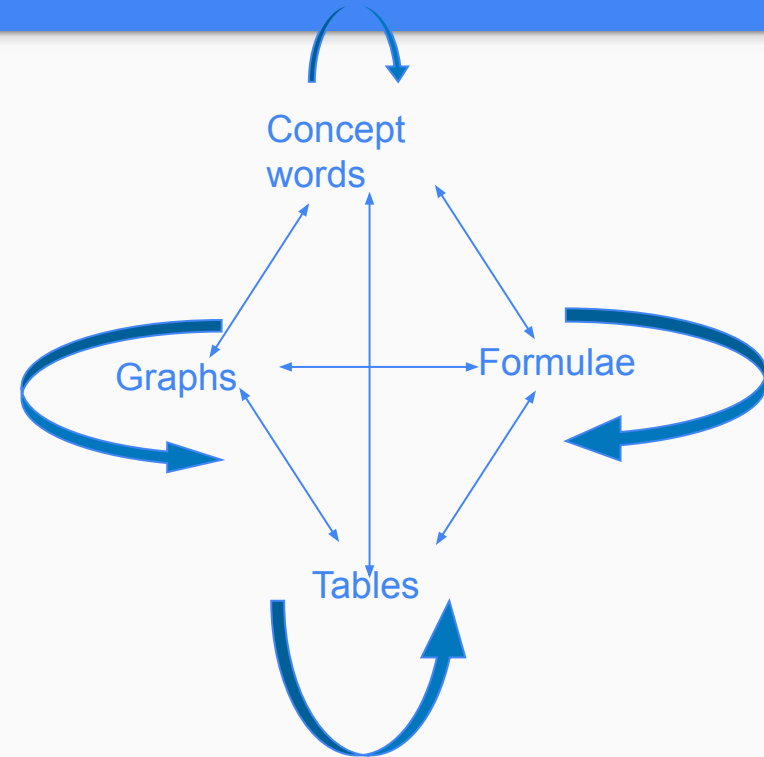
How to assess knowledge, skills and values/responsibilities?

- **Team-based learning (TBL):** iRAT & tRAT

Tips to use Moodle's open question type

Ask students to explain information in different ways, e.g.:

- the same content presented in text, video, audio formats,
- link information presented in text format with visual material;
- link the information presented in text format with graphical (statistical or other) information



How to assess knowledge, skills and values/responsibilities?

- **Team-based learning (TBL): iRAT & tRAT**

Tips to use Moodle's open question type

The ability to **analyze information** and **apply knowledge** can be assessed along with the application of students' **critical thinking skills**. Teachers may ask students to:

- compare facts or situations presented in the study material and providing a reasoned evaluation of the comparative objects
- critically analyse the given answer options, select the most appropriate and justify the choice

How to assess knowledge, skills and values/responsibilities?

- **Team-based learning (TBL): iRAT & tRAT**

Moodle tests: general recommendations

- ✓ Provide clear instructions;
- ✓ Include **at least one open question**;
- ✓ Try to create closed questions using automatic correction and feedback;
- ✓ Calculate the duration according to the number of questions;
- ✓ Use the question shuffling option.

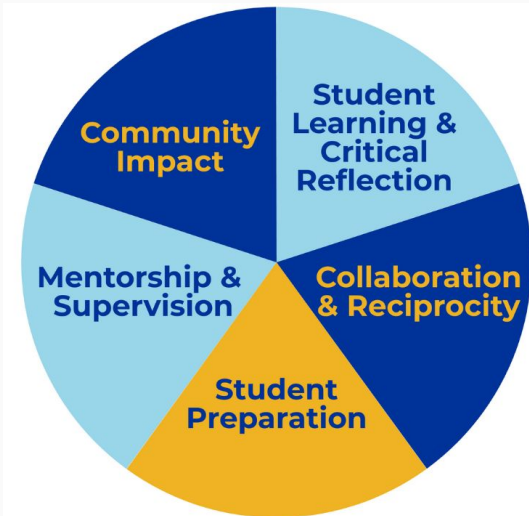
If you are organizing the test in the **Moodle environment** for the **1st time**,
ask a specialist to review the settings

How to assess knowledge, skills and values/responsibilities?

- **Challenge-based learning (CBL)**. refers to the identification, analysis and design of a solution to a sociotechnical problem. The learning experience is based on multidisciplinary and collaborative work (with different stakeholders) to develop a solution, which is environmentally, socially and/or economically sustainable (Kohn Rådberg, Lundqvist, Malmqvist, & Hagvall Svensson, 2020).

How to assess knowledge, skills and values/responsibilities?

- Challenge-based learning (CBL)



The Five Key Elements of CBL Courses

<https://my.wlu.edu/office-of-community-based-learning/for-faculty/the-five-key-elements-of-cbl>



How to assess knowledge, skills and values/responsibilities?

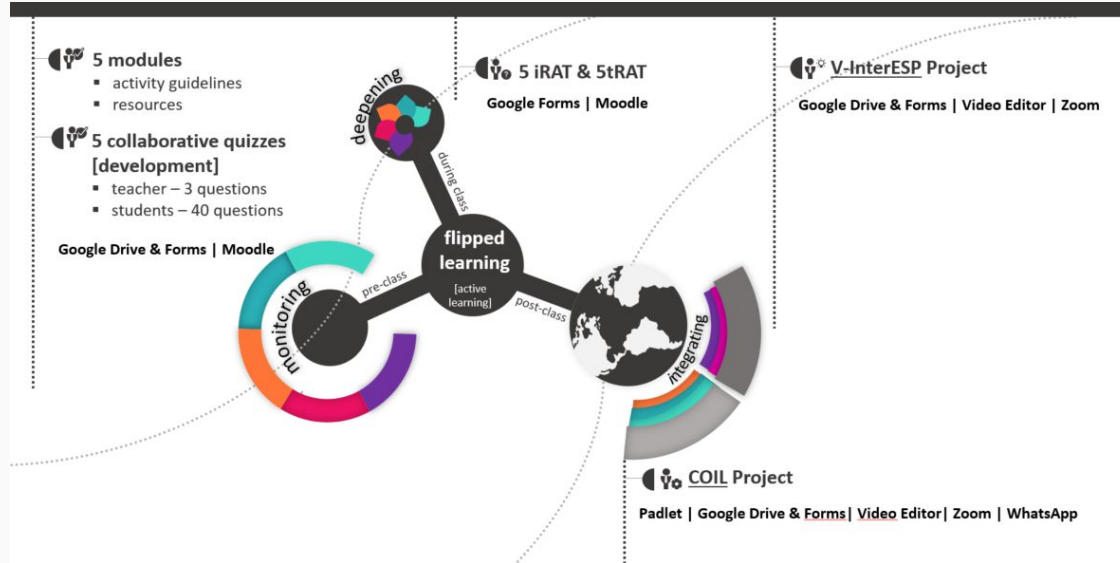
- **Collaborative Online International Learning (COIL)** is based on the students' use of digital technology to develop collaboration-based activities with international peers; thus, opening up the opportunity for a wider participation in academic mobility programs, which usually demand geographical displacement.

How to assess knowledge, skills and values/responsibilities?

- **Collaborative Online International Learning (COIL)**



Best practice example



Flipped learning:

- *pre-class activities*: collaborative development of questions for 5 quizzes (1 per module) [asynchronous online work]
- *class activities*: 5 iRAT & tRAT selected set of questions [digitally-enhanced f2f work]
- *post-class activities*: international projects [(a)synchronous online work]