TALOE
TIME TO ASSESS LEARNING OUTCOMES IN E-LEARNING

The TALOE project – assessment of learning – 2nd part

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eucen european university continuing education network

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Introduction

- Meet a participant you don't know
- Get acquinted and find out:
  - Where he/she works
  - Why he/she enrolled for the workshop and with what expectatons
- Introduce this participant to other participants

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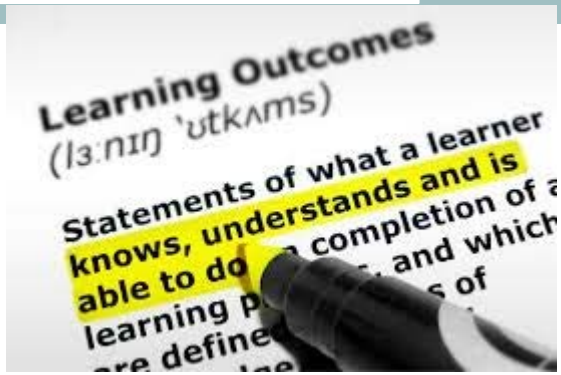
About learning outcomes



- A learning outcome (LO) is the specification of what a student should learn as the result of a period of specified and supported study
- Outcomes are usually expressed as knowledge, skills, or attitudes
- They can be defined at different levels:
- LO of the study programme
- LO of the course
- LO of the module

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Why we need clearly defined Learning Outcomes?

- Students will know what to expect from the course/module
- Students will better understand what is expected from them
- Potencial students and employers will have better understanding of what will student know and be able to do after finishing a study

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Learning Outcomes should be

Stated from the student's position

- *Student will understand the nine reasons for conducting a need assessment*
- *Student will be able to explain advantages and disadvantvages of on-line communication*

Observable and measurable

- *Student will be able to list nine reasons for conducting a need assessment*
- *Student will be able to summarize three major groups of learning theories and their representatives/authors of some theories*

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Learning outcomes of a course/module

- Do you have experience in writing learning outcomes ?
- What is your experience (problems, what helped, ...)?
- Choose a course/module within the group for which you will write LO's

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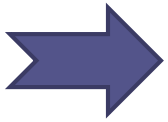
Questions to be asked?

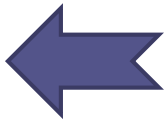
Cyclic plan of use and evaluation of LO's

How to ensure that learning outcomes, teaching and learning are consistent? - *evaluation*



What is important that student learn during the study – *learning outcomes*

How to organize teaching and learning to be achievable by the majority of students – *methods/way of learning*



Which assessment and grading methods to choose in order to reach valid information how much are achieved defined learning outcomes by student - *grading*

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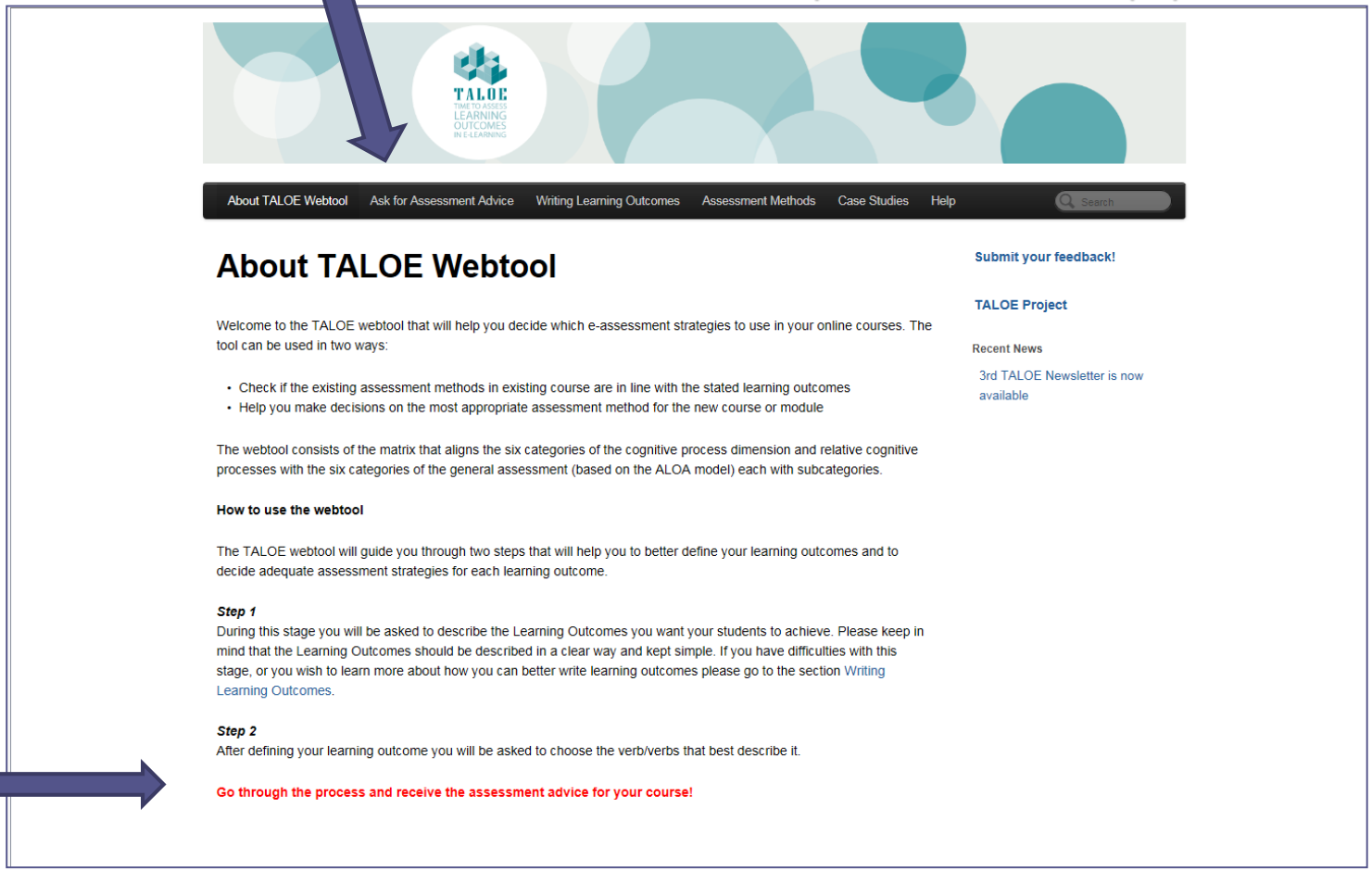
How to use TALOE web tool

http://taloetool.up.pt/



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What can you do with this tool?

- Check if the existing assessment methods in courses are in line with the stated learning outcomes
- Use it as help in decision on the most appropriate assessment methods for the new course or module

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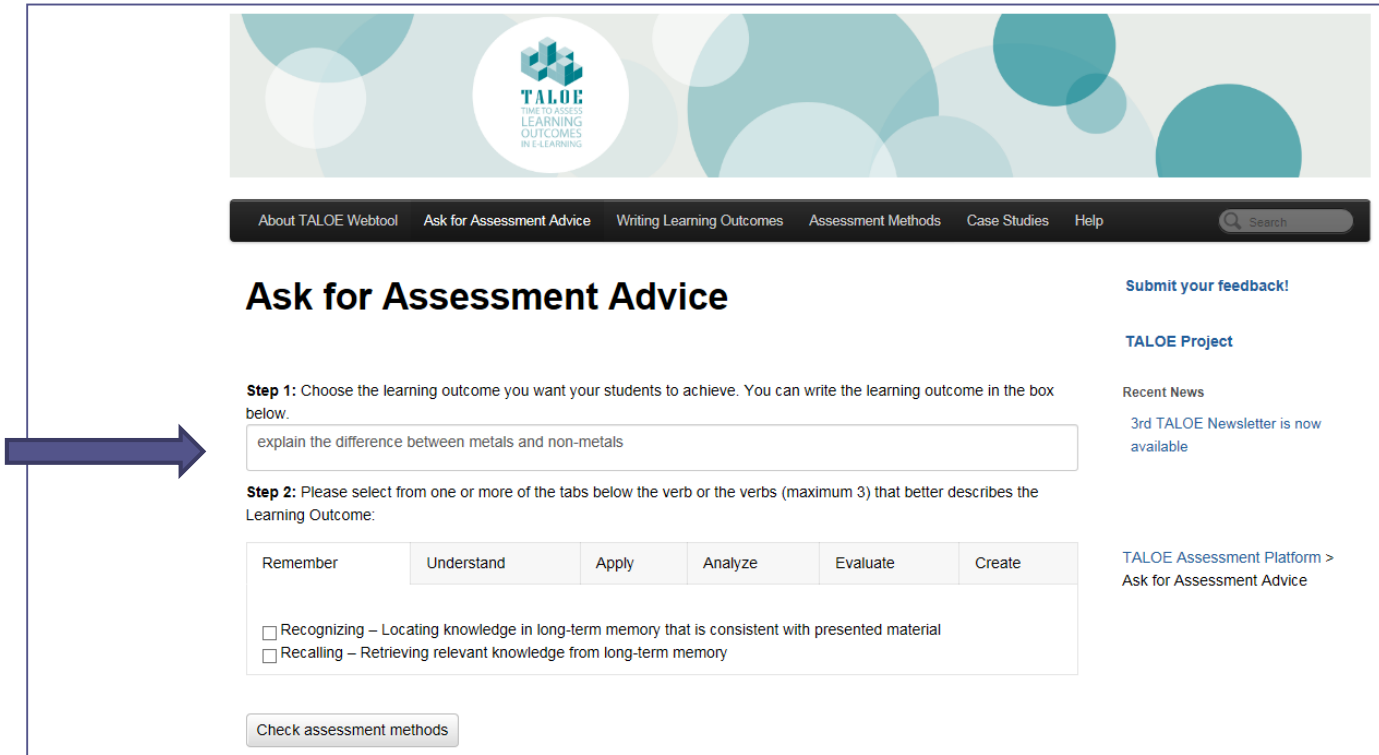
Write your learning outcome



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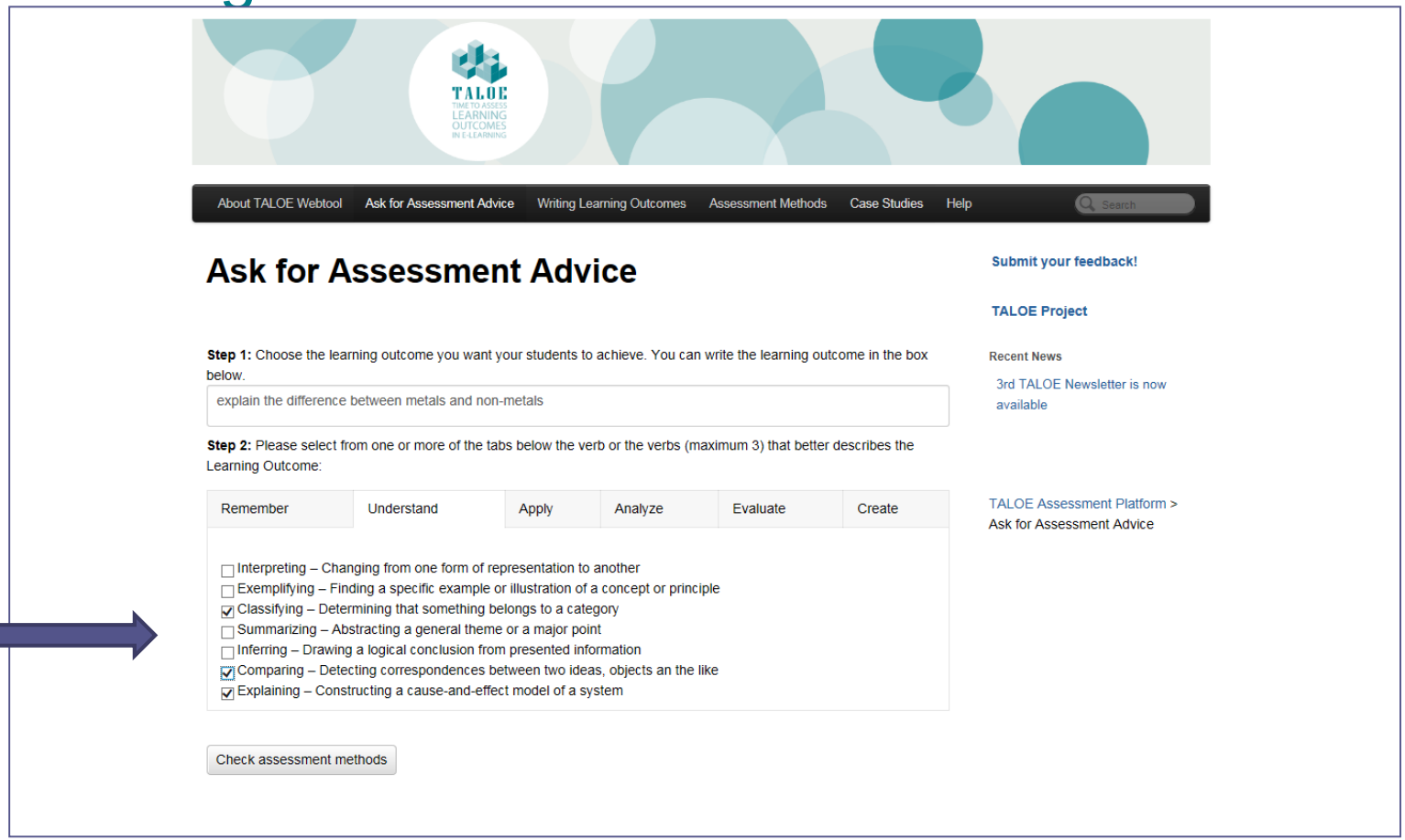
Select three verbs that describe the learning outcomes



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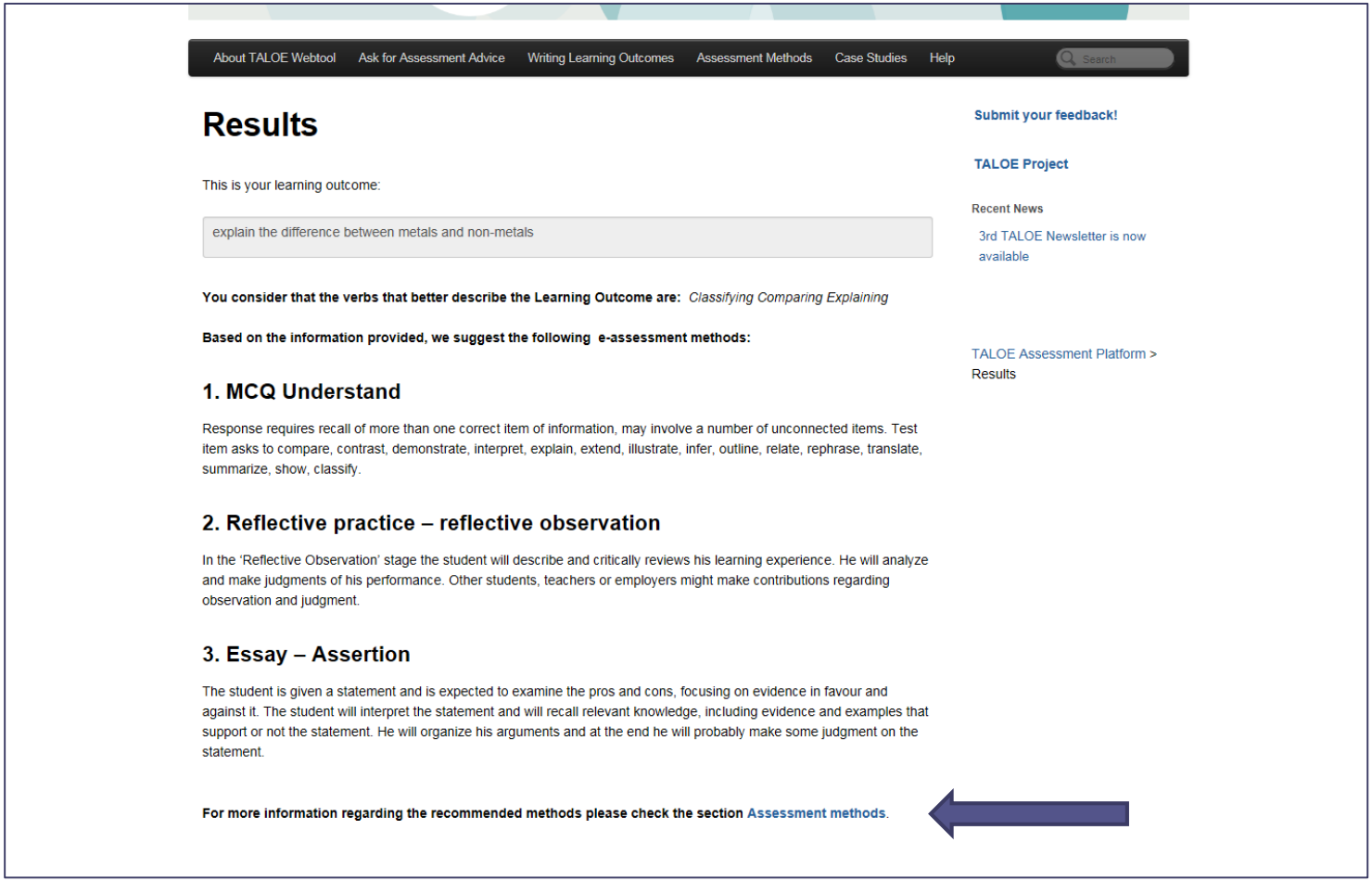
Results



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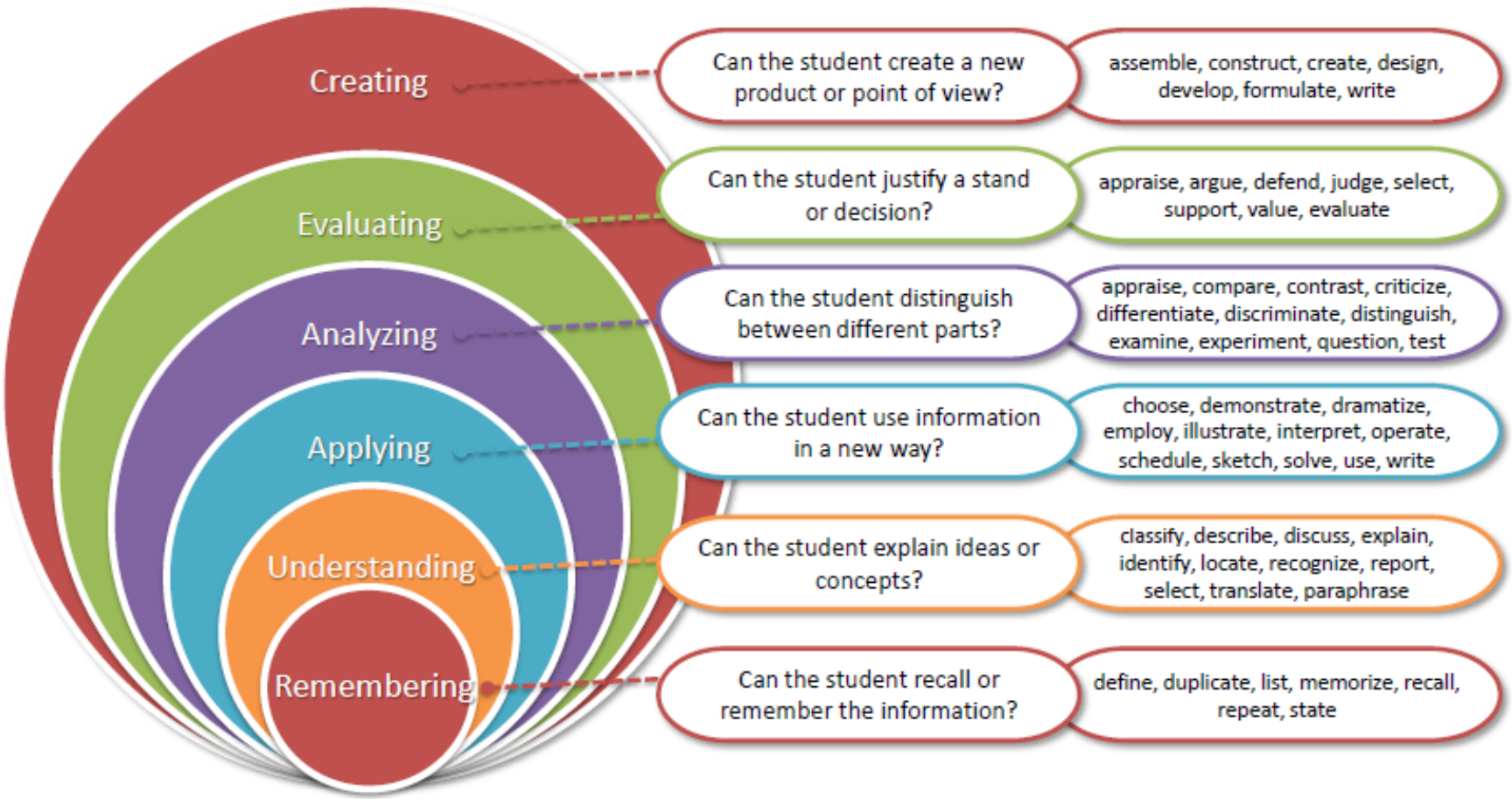
Bloom's Taxonomy (Revised)



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The cognitive process dimension – categories, cognitive processes

lower order thinking skills → **higher order thinking skills**

remember	understand	apply	analyze	evaluate	create
recognizing • identifying recalling • retrieving	interpreting • clarifying • paraphrasing • representing • translating exemplifying • illustrating • instantiating classifying • categorizing • subsuming summarizing • abstracting • generalizing inferring • concluding • extrapolating • interpolating • predicting comparing • contrasting • mapping • matching explaining • constructing models	executing • carrying out implementing • using	differentiating • discriminating • distinguishing • focusing • selecting organizing • finding coherence • integrating • outlining • parsing • structuring attributing • deconstructing	checking • coordinating • detecting • monitoring • testing critiquing • judging	generating • hypothesizing planning • designing producing • constructing

(Table adapted from Anderson and Krathwohl, 2001, pp. 67–68.)

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Task 2- Learning outcomes in e-course

- Taking into consideration Bloom taxonomy write three learning outcomes for the chosen e-course

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E-assessment - definition

- e-Assessment is the end-to-end electronic assessment processes where ICT is used for the presentation of assessment activity, and the recording of responses. This includes the end-to-end assessment process from theperspective of learners, tutors, learning establishments, awarding bodies and regulators, and the general public. (JISC/QCA)

- e-assessment refers to assessment methods and practices that emphasize the role of information technology relative to measuring students' learning.

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Advantages of e-assessment

- immediate feedback to students,
- allows rehearsal and revision,
- immediate feedback to staff,
- allows evaluation of a course's strengths and weaknesses,
- can be linked to other computer-based or online materials.

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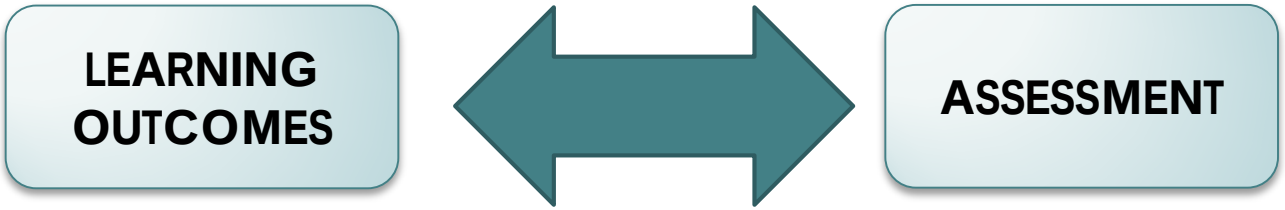
Constructive alignment

- a principle used for devising teaching and learning activities, and assessment tasks, that directly address the learning outcomes intended in a way not typically achieved in traditional lectures, tutorial classes and examinations (Biggs and Tang, 2011).
- Approach where planning of the course starts with clear vision of learning outcomes
- LO of the course should be aligned with content and activities in course and with assessment methods



What do we hope students will learn?

How do we know that they have learned?

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Learning Outcomes	Activities	Assessment
Remember Understand Apply Analyse Evaluate Create	Lectures Discussions Laboratory work Tests Problems to solve Field work Group work Presentations in group Homework	Types of questions in exams Evaluation of practical work Report on individual work Projects Presentations Seminars Essays

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Examples (1)

Learning outcome	Content/way of learning	Assessment	Workload
To be able to count types of questions in exams	Lecture, text in a textbook about the types of questions in exams	To count questions in exams and group them	6 hours
To be able to analyse questions in exams	Lecture, discussions in small grouls about adv and disadv of some types of questions, work in pairs on the analysis of prepared questions	State the adv. And diadv. Of questions; MCQ, compare essay type questons acording to adv. And disadv.	8 hours
Prepare exam	Lecture, demonstration of steps in the exam preparation, individual work in preparation of questions, work in small groups to choose questions and design exam	Prepare the exam in Chemistry according to the course programme	15 hours

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Examples (2)

Learning outcome	Content/way of learning	Assessment	Workload
Application methods and techniques of project management for writing application for international project in the area of HE	Team work on the specifict project application	Project application handed through theLMS and graded according the defined grading scheme (rubrics)	40 hours
solve problems in the field of discrete matematics and graph theory independently and in a team	Work in seminars, individual work withing the LMS, team work on solving problems	problem unstructured task in two stages	20 hours
Apply theorems and algoritms from the graph theory on solving middle level task	Exercises, individual work, demonstrations	Colloquium, test in LMS	15 horus

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Task 3- Assessment methods in e-course

- Write for each defined LO e-assessment methods

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Checking with TALOE web tool

learning outcome	conetent/way of learning	assessment	workload	proposed assessment by TALOE

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Present your results

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