

ECTS – Challenges of writing learning outcomes

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Programme Competences and Learning Outcomes

Competences

- Similar to the requirements of short job description;
- Property of the student (describes what student can do);
- Contains information of the context in which competence is applied

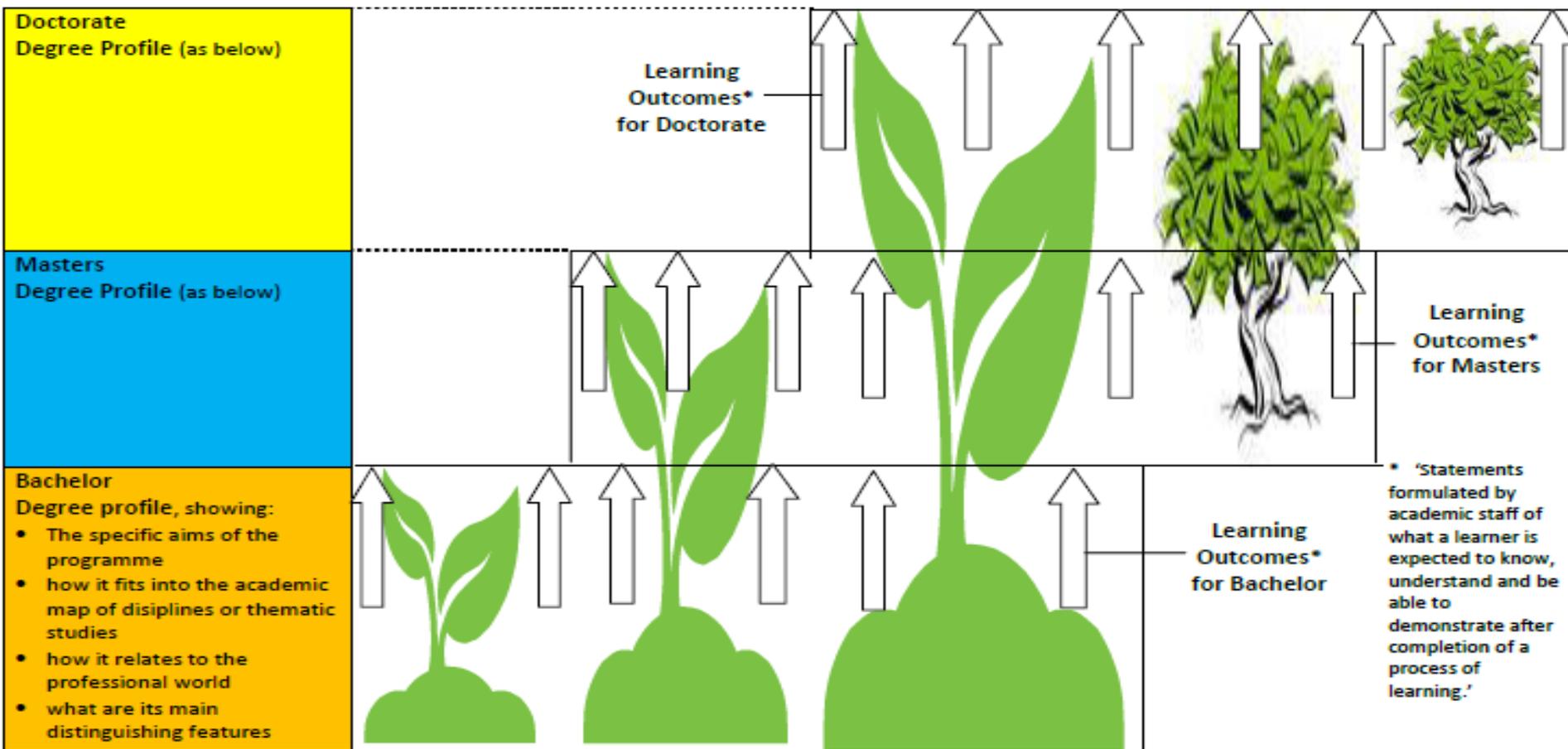
Learning outcomes

- A longer statement describing a measurable outcome of a competence
- Indicates to which level the competence has been developed within the programme.

Relationship between competences and LO

(by Jeremy Cox, Polifonia)

Competences: 'a dynamic combination of knowledge, understanding, skills and abilities [...] formed in different course units and assessed at different stages'



Relation between Competences and LO in study cycles (subject area of social work) (Lithuanian case)

Generic competence	Ability to plan and organize		
LO	Professional bachelor	Bachelor	Master
	<p>Estimates time needed to reach goals and meets deadlines.</p> <p>Differentiates between primary and secondary aims of the activity.</p> <p>Plans stages of the activity according to the available guidelines</p>	<p>Distributes roles to the team members in order to reach goals.</p> <p>Adjusts activities according to the analysis of the results and recommendations of the experts.</p> <p>Plans activity after having critically evaluated controversial information from different sources</p>	<p>Plans complex activity composed of interrelated tasks.</p> <p>Depending on the changing situations adjusts plans in the process of activity implementation.</p> <p>Plans stages of activity evaluating risks of unknown situations</p>
Subject specific competence	To influence social policy through analysis and evaluation of social processes based on research and practice in social work and other subject areas		
LO	Professional bachelor	Bachelor	Master
	<p>Discuss questions related to social help processes and proposes ideas/solutions for the increase of their effectiveness</p>	<p>Evaluate processes of social help and propose solutions based on theory and interdisciplinary practice that would lead to the increase of effectiveness.</p> <p>Critically evaluate various social care systems and offer solutions to enhance Lithuanian social care system.</p>	<p>Explain movements and initiatives aimed at decreasing social exclusions and ensuring social justice.</p> <p>Critically evaluate various social care systems through the analysis of the effectiveness of available services.</p>

Generic competences and LO in social work of Master degree

Leadership
and
management

Competence

- Analyze the work of the organization and submit proposals for the improvement
- Lead the team, manage communication and decision taking processes

LO

The above only deals with the relationship between Unit and Programme LOs at the *final* level. There is also the question of how LOs are built towards throughout the levels of the programme. It is helpful to have some notion of the typical milestones towards each Programme LO by Level/Year. An example for a four-year Bachelor programme in Music:

LEARNING OUTCOME 1: SKILLS IN ARTISTIC EXPRESSION

Year 4

At the *completion of their studies*, students should be able to create and realise their own artistic concepts and should have developed the necessary skills for their expression.

Year 3

Milestone 3:
At the completion of their *third year of studies*, students should be beginning to develop their own artistic intentions into creative conceptions spanning entire works and should have developed the necessary skills to integrate technical and imaginative aspects almost seamlessly.

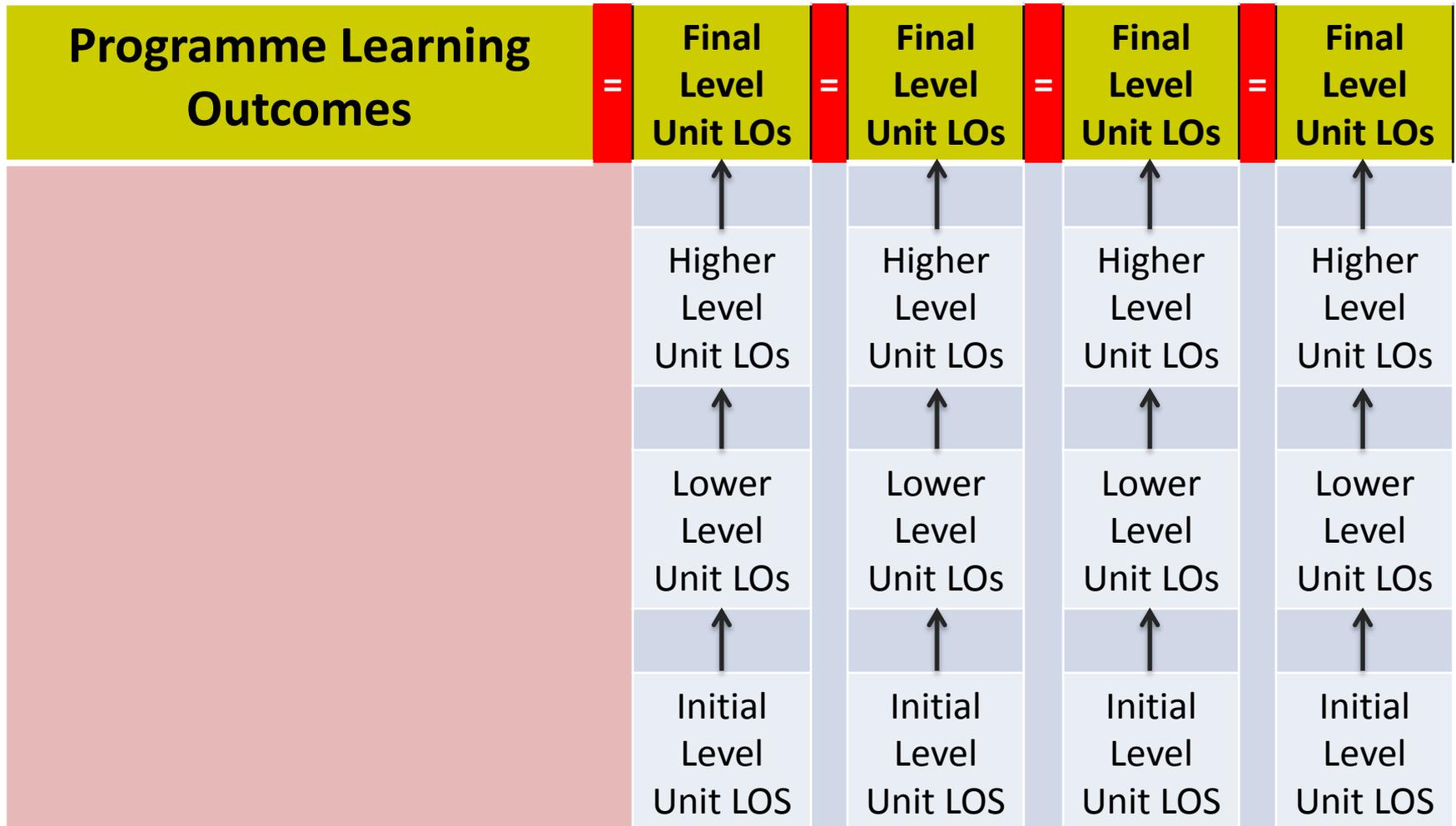
Year 2

Milestone 2:
At the completion of their *second year of studies*, students should be able to formulate their own artistic intentions and should have developed the necessary skills to implement these, or respond imaginatively to suggestions from their teacher, with fluency and technical security.

Year 1

Milestone 1:
At the completion of their *first year of studies*, students should have developed sufficient technical skills and security to be able to concentrate upon developing their skills in artistic expression.

All units are – in one way or another –
related to each other.



Learning outcomes and competences in study programmes (Tuning)

Course unit LO	Competences									
	A	B	C	D	E	F	G	H	I	J
Unit 1		X			X					
Unit 2	X			X			X			
Unit 3		X				X			X	
Unit 4	X		X							X

Example of Programme Learning Outcomes [BSc(Ed)]

On successful completion of this programme, students should be able to:

- Recognise and apply the basic principles of classroom management and discipline.
- Identify the key characteristics of excellent teaching in science.
- Develop comprehensive portfolios of lesson plans that are relevant to the science curricula in schools.
- Evaluate the various theories of Teaching and Learning and apply these theories to assist in the creation of effective and inspiring science lessons.
- Critically evaluate the effectiveness of their teaching of science in the second-level school system.
- Display a willingness to co-operate with members of the teaching staff in their assigned school.
- Foster an interest in science and a sense of enthusiasm for science subjects in their pupils.
- Synthesise the key components of laboratory organisation and management and perform laboratory work in a safe and efficient manner.
- Communicate effectively with the school community and with society at large in the area of science education.

Keep in mind!....

Not every Programme LO need wait until the final year for completion, e.g. example for Music of Aural Skills:



These skills are essential, therefore key Programme LOs, but should be fully developed *before* students complete their studies. Commonly, they are compulsorily assessed for the last time at the end of the Second Year



To keep track of Programme LOs it can be helpful to give them numbers/letters and just list the relevant ones in each Unit Description. The Unit Description will then included fully-stated LOs of its own

LO not replacement but a supplement of describing teaching and learning

Aims and objectives

Focus on teaching – aims and objectives and use of terms like *know, understand, be familiar with.*

Aims: Give broad purpose or general intention of the module; Objectives: Information about what the teaching of the module hopes to achieve.

Learning outcomes

Outcomes: Focus on what we want the student to be able to do - use of terms like define, list, name, recall, analyse, calculate, design, etc.

Emphasis on the learner and his ability to do something

Characteristics of Learning outcomes

Learning outcomes describe what a learner is expected to know, understand and be able to do after successful completion of a process of learning.

they must be assessed therefore they need to be obtainable and measurable

they need to contain an appropriate active verb

involve students in undertaking work and therefore have a workload associated with them

need to be written in a holistic context taking into account the Learning and Assessment

Feedback should be given in relation to Learning Outcomes

Programme vs module Learning outcomes



Programme

- Broad
- Achievable
- Integrated
- Generalised version of module LO



Module

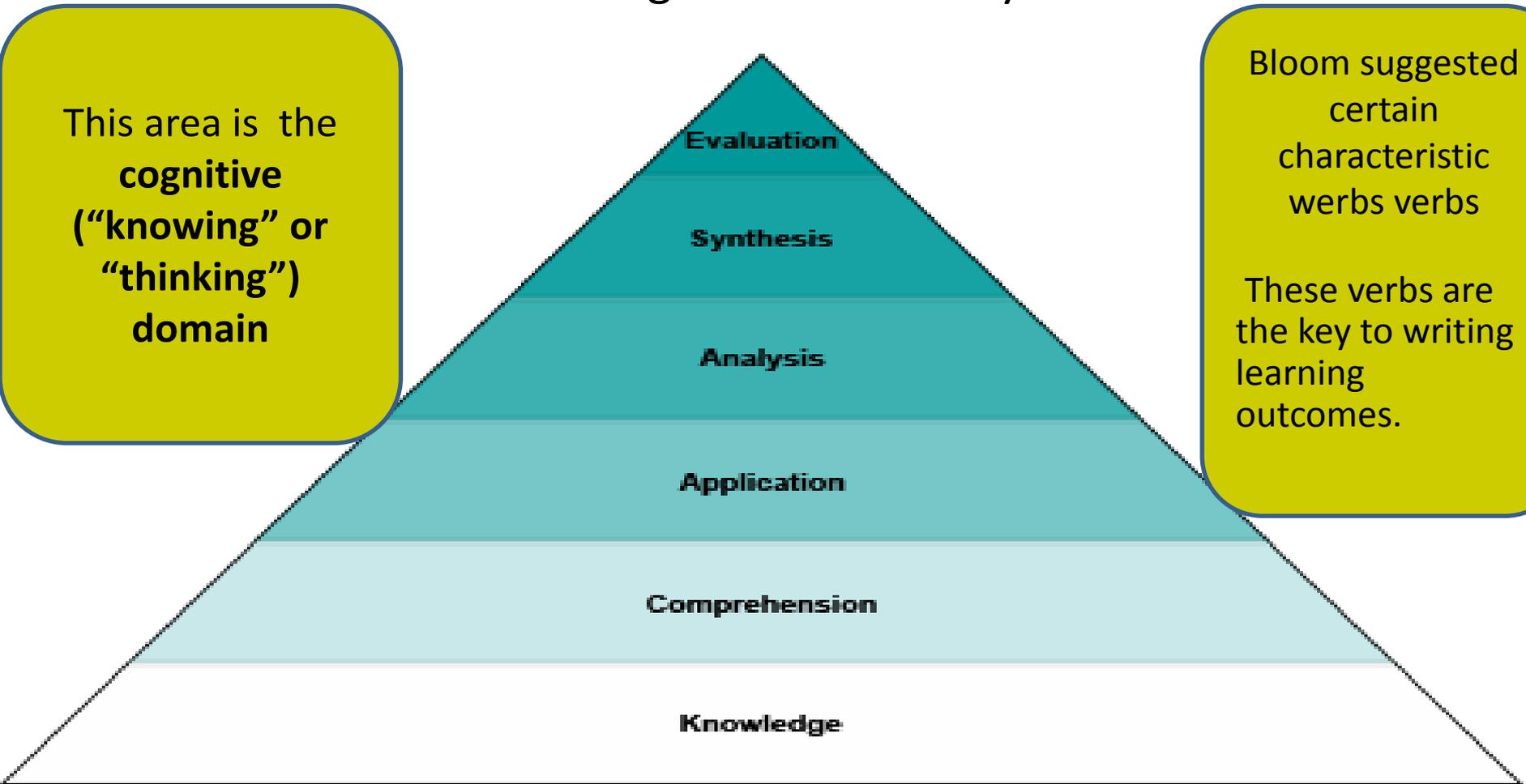
- Specific
- Assessable
- Performance based
- Specific to subject area level

Bloom (1956) - knowing is composed of six successive levels arranged in a hierarchy.

This area is the **cognitive** (“knowing” or “thinking”) domain

Bloom suggested certain characteristic verbs

These verbs are the key to writing learning outcomes.



Bloom's Taxonomy of learning. Adapted from: Bloom, B.S. (Ed.) (1956) Taxonomy of educational objectives: The classification of educational goals. Handbook I, cognitive domain. New York ; Toronto: Longmans, Green.

KNOWLEDGE	COMPREHENSION	APPLICATION	ANALYSIS	SYNTHESIS	EVALUATION
Cite	Associate	Apply	Analyze	Arrange	Appraise
Count	Classify	Calculate	Appraise	Assemble	Assess
Define	Compare	Classify	Calculate	Collect	Choose
Draw	Compute	Demonstrate	Categorize	Compose	Compare
Identify	Contrast	Determine	Classify	Construct	Criticize
List	Differentiate	Dramatize	Compare	Create	Determine
Name	Discuss	Employ	Debate	Design	Estimate
Point	Distinguish	Examine	Diagram	Formulate	Evaluate
Quote	Estimate	Illustrate	Differentiate	Integrate	Grade
Read	Explain	Interpret	Distinguish	Manage	Judge
Recite	Express	Locate	Examine	Organize	Measure
Record	Extrapolate	Operate	Experiment	Plan	Rank
Repeat	Interpolate	Order	Identify	Prepare	Rate
Select	Locate	Practice	Inspect	Prescribe	Recommend
State	Predict	Report	Inventory	Produce	Revise
Tabulate	Report	Restructure	Question	Propose	Score
Tell	Restate	Schedule	Separate	Specify	Select
Trace	Review	Sketch	Summarize	Synthesize	Standardize
Underline	Tell	Solve	Test	Write	Test
	Translate	Translate	<u>Prove</u>		Validate
		Use			
		Write			

Issues for staff – find your way!

Bloom's taxonomy

- Should be seen as a toolkit
- Any other taxonomy or tool might be used

Competences

- Competences should be seen as an important element for the dialogue with the employers
- LO are more programme specific and indicate the level

Development of the module

NOTE:

Module – a course unit in a system where each course unit carries the same number of credits or a multiple thereof (ECTS)

Aims and objectives of the module



Aims are reflected in the module LO (LO written in a way that they may be tested)



Assessment tasks



Criteria for grading the assessment

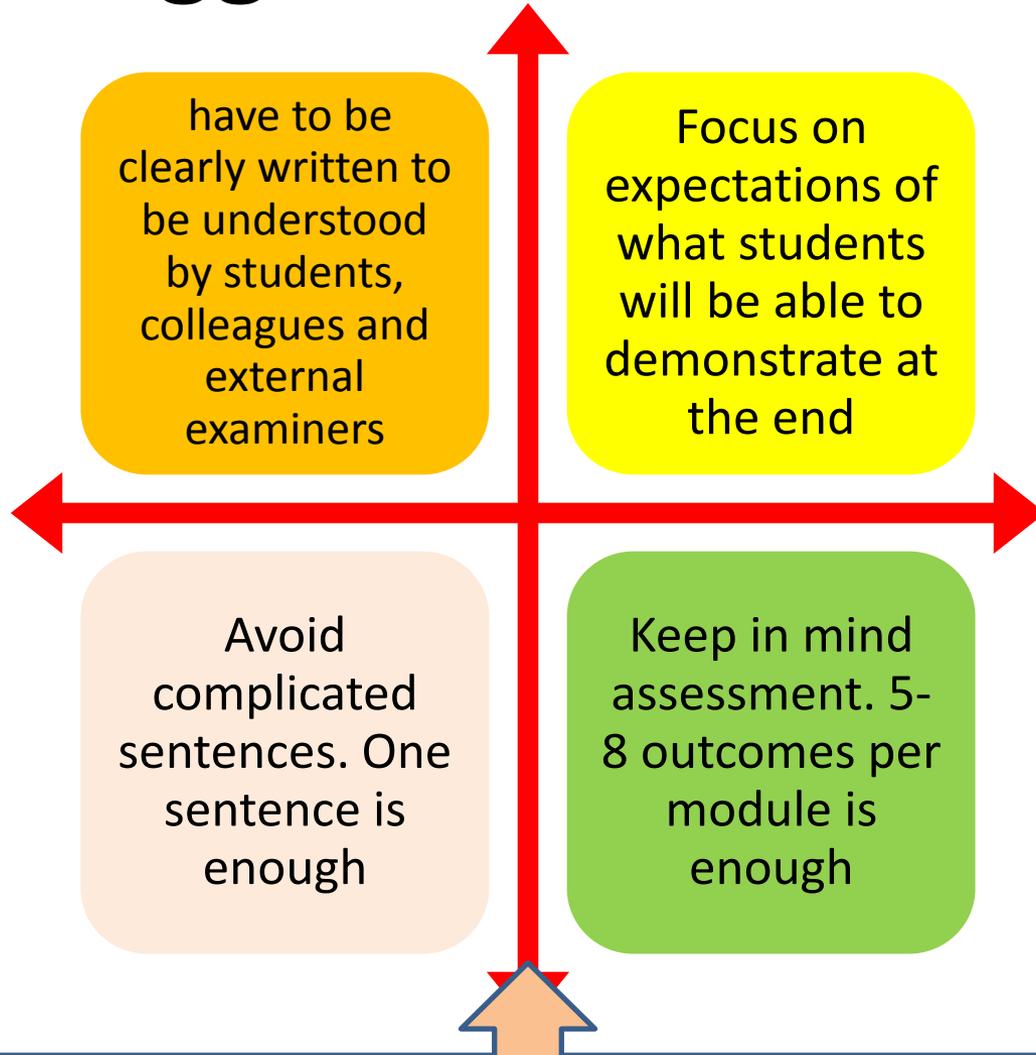


Teaching and learning strategy

NOTE:

➤ Small modules – information more specialized but less integrated
➤ Big modules – clearer structure of the programme, better coherence in the studied subject, but more difficult to transfer to other context and compare.

Basic suggestions on writing LO



Start with the phrase: "On successful completion of this module, students should be able to:"

NO

Students will understand 10 reasons for change

Students will appreciate cultural diversity

Yes

Students will be able to list 10 reasons for change

Students will summarize their feelings about cultural diversity

Points to consider: is the student' learning process observable? Progress measurable? Performable, therefore assessable?

Further suggestions:

- Be realistic: take into account prior knowledge, available time and the learning opportunities
- Avoid LO that are too broad or too narrow
- Avoid verbs like: “know”, “understand”, “learn”, that are vague and subject to interpretation
- May use open-ended lo to allow creativity, e.g. “apply theory critically to analyse a given situation”
- Ensure that LO are assessable

Check list for writing module LO

Verb

- Have I begun each outcome with an active verb?

Terms

- Have I avoided terms like *know, understand, learn, be familiar with, be exposed to, be acquainted with, be aware of and appreciate?*

Level

- Have I included learning outcomes across the range of levels of Bloom's Taxonomy? (cognitive domain: knowledge, comprehension, application, analysis, synthesis, evaluation & affective domain: attitudes)

Assessment

- Are my outcomes observable and measurable?

Fitness

- Do all the outcomes fit within the aims and content of the module?

Student workload – issue to consider

(input: *Give me time to think*, U-ty of Oulu)

- Preliminary work before contact hours;
- Contact hours;
- Individual work after contact hours. Individual work will depend on study methods used.



Example: Aspects of Marital Law and Practice in the 17th Century (by R. de Lavigne)

A student who successfully completes this module will be expected to be able:

- 1. To demonstrate detailed knowledge of both the legal and the social framework of marriage in Western Europe in this period.**
- 2. To analyse the reasons for variations in legal frameworks and of social practice in both space and time.**
- 3. To explore the link between marriage, on the one hand, and natality and mortality, on the other hand, as determinants of population trends.**
- 4. To display the analytical tools and skills of the socio-legal historian, with particular reference to the selected legal and social texts of the period.**
- 5. To deploy statistical information using information and communication technology where appropriate.**
- 6. To demonstrate an ability to work both independently and in groups in order to propose solutions to problem areas within this field.**
- 7. To work in more than one European language.**

Example: Calculation of the workload

The planned third-year tutorial model comprises 10 ECTS (250-300 hours):

- Tutorial: 2 hours per week x 14 weeks (25/30 hours = **1 ECTS credit**)
- Studying a textbook (500 pages) and sitting exam – 6 paged per hour = 83 hours = **3 ECTS credits**
- Writing a 7-10 page paper (700-1000 pages of literature must be read) = 140 hours = **5 ECTS credits**
- Reading and commenting on assignments written by group members (critical reflection) – (2 hours per week x 14 weeks = 28 hours = **1 ECTS credit**)

$1+3+5+1 = 10$ ECTS credits

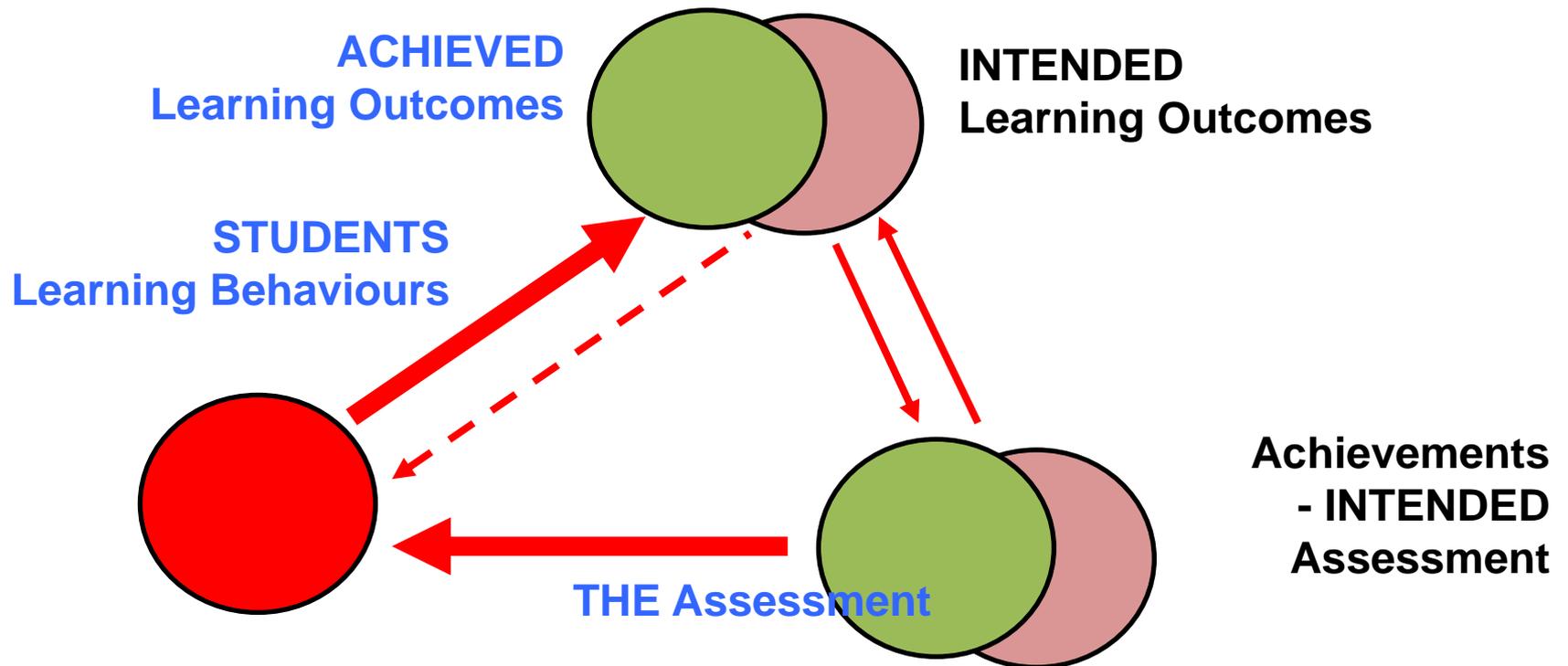
Tuning Links Learning to Assessment

First, needs analysis = students required performance

This informs the intended assessment.

Write LOs to tell students and staff what is intended.

Use LOs to write new assessments / exams



Constructive alignment

- Constructive alignment is the deliberate linking within curricula of aims, learning outcomes, learning and teaching activities and assessment.
- Learning Outcomes state what is to be achieved in fulfilment of the aims.
- Learning activities should be organised so that students will be likely to achieve those outcomes.
- Assessment must be designed such that students are able to demonstrate that they have met the learning outcomes.
- Constructive alignment is just a fancy name for “joining up the dots”.

(Morss and Murray, 2005)

Assessment on module level

Module	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6
Task 1						
Task 2						
Task 3						
Exam						

Isn't the first LO assessed too much? Is there no need to assess LO2? Do we need to assess LO 1, 3, 4 5 and 6 during the exam? What LO are assessed during the task 3? Is exam a real tool of assessment? Why so many LO are assessed in the exam when other tasks/methods are also used?

