Learning Outcomes
that make sense for
Educationalists & Subject Specialists

Introduction of concepts

mastermind EUROPE
Master's admission
for a diverse international classroom

Key messages presentation 1

1. Master's education is getting too diverse
   to define one set of research competencies
2. Research competencies are not restricted to subject-specific knowledge & skills;
   they also encompass General Academic, Personal and Linguistic competencies
3. High quality Master's programmes need a coherent framework of research competencies and related learning outcomes

Key messages presentation 2

1. Learning outcomes are crucial
   to improve competencies of Master's graduates
2. Master's programmes need Learning Outcomes in: Subject, Academic, Personal, & Linguistic skills
3. Assessment of Learning Outcomes is subjective, at best intersubjective

1. Learning outcomes are crucial

- Dublin descriptors: circular & not specific:

"… knowledge and understanding that is founded upon and extends and/or enhances that typically associated with Bachelor's level…"

http://ecahe.eu/w/index.php/Dublin_Descriptors

1. Learning outcomes are crucial

- Definition of Learning Outcomes

"Learning outcomes are statements of what a student should know, understand or be able to do at the end of a learning proces."

https://www.cedefop.europa.eu/files/4156_en.pdf

1. Learning outcomes are crucial

- Components of Learning Outcomes
  - Criteria: What is it that students have to be good at?
    What kind of knowledge, skill, behaviour, attitude?
  - Norms: How good do students have to be at it?
    What level of knowledge, skill, behaviour, attitude?
    What level is adequate, what level is inadequate?

1. Learning outcomes are crucial

- Use of Learning Outcomes
  - Can we build a testing instrument without knowing what to measure?
  - Testing: tools/processes to find out if students are good enough in the things they need to be good at?
    - Minimum for all students
    - Above minimum in some Learning Outcomes?

1. Learning outcomes are crucial

- Use of Learning Outcomes
  - Testing: tools/processes to find out of students are good enough in the things they need to be good at?
    - Minimum for all students
    - Above minimum in some Learning Outcomes?
  - Testing: an art, not a science
    - Imperfect approximations of reality
    - Intersubjectiveness and triangulation

1. Learning outcomes are crucial

- Use of Learning Outcomes

Does it help if students know the Learning outcomes:

  - not only subject knowledge & skills, but also
  - General academic competencies?
  - Personal competencies?
  - Language competencies?

2. Learning Outcomes: Subject, Academic, Personal, & Linguistic

- Criteria & Norms: in what?
- Four categories of things to be good (enough) in:
  - Subject-related knowledge & skills
  - General Academic Competencies
  - Personal Competencies & Traits
  - Linguistic competencies

2. Learning Outcomes: Subject, Academic, Personal, & Linguistic

- Coherent framework for development of scientific competencies for Master's students

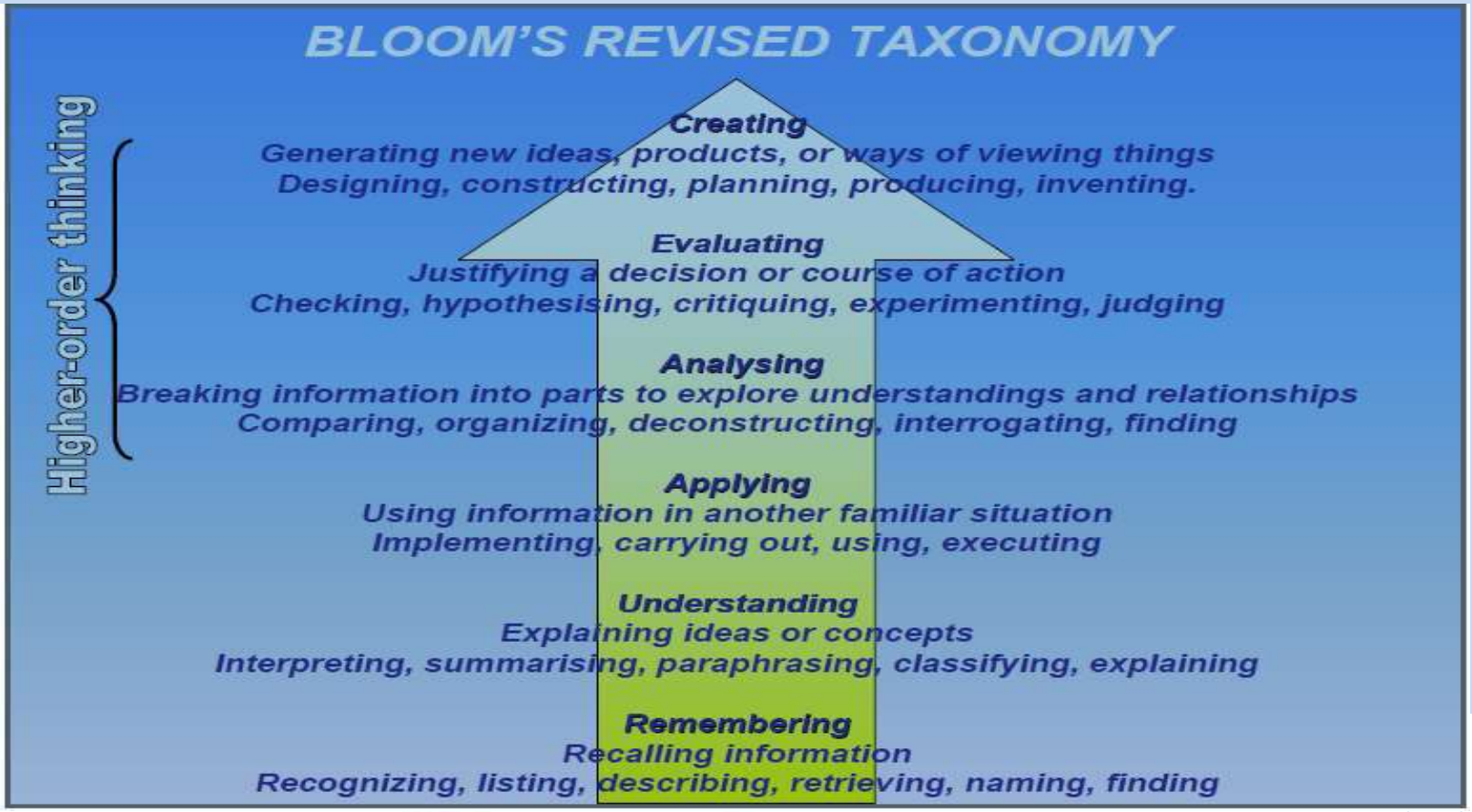
	Criteria	Norms	Tests
Subject	e.g. $E=MC^2$	Can apply independently	thesis
Academic	Critical thinking	Can identify logical fallacies	In oral exam
Personal	Group work	Can work with 'outsiders'	??
Language	Can write paper	With minor edits by native speaker	Thesis?

2. Learning Outcomes:
Subject- related knowledge & skills

- Not my competency
- Discuss among academic specialists
- Under guidance of Master's director
- Avoid academic hobbyism

2. Learning Outcomes: General academic competencies

- Revised Bloom's taxonomy of Learning



2. Learning Outcomes: General academic competencies

- General Academic Competencies
  - AACU VALUE Rubrics (presentation 3)

https://www.aacu.org/value-rubrics

2. Learning Outcomes: General academic competencies

- General Academic Competencies - Tests
  - Graduate Record Examination (GRE)
  - Graduate Management Admission Test (GMAT)
  - HEIghten suite

NB none of these for Master's graduation

https://www.ets.org/gre

https://www.mba.com/exams/gmat

https://www.ets.org/heighten

2. Learning Outcomes: Personal competencies & traits

- Competencies ←→ personality traits
- Personality traits: Big 5 → Big 6 Hexaco

1. Honesty/humility
2. Emotional control
3. eXtraversion
4. Agreeableness
5. Conscientiousness
6. Openness

https://en.wikipedia.org/wiki/HEXACO_model_of_personality_structure

2. Learning Outcomes: Personal competencies & traits

- Competencies: Great Eight

1. Leading & deciding
2. Supporting & cooperating
3. Interacting & presenting
4. Analysing & interpreting
5. Creating & Conceptualising
6. Organising & coping
7. Enterprising & performing

2. Learning Outcomes: Personal competencies & traits

- AACU VALUE Rubrics (presentation 3)

2. Learning Outcomes: Linguistic competencies

- Common European Framework of Languages (presentation 3)

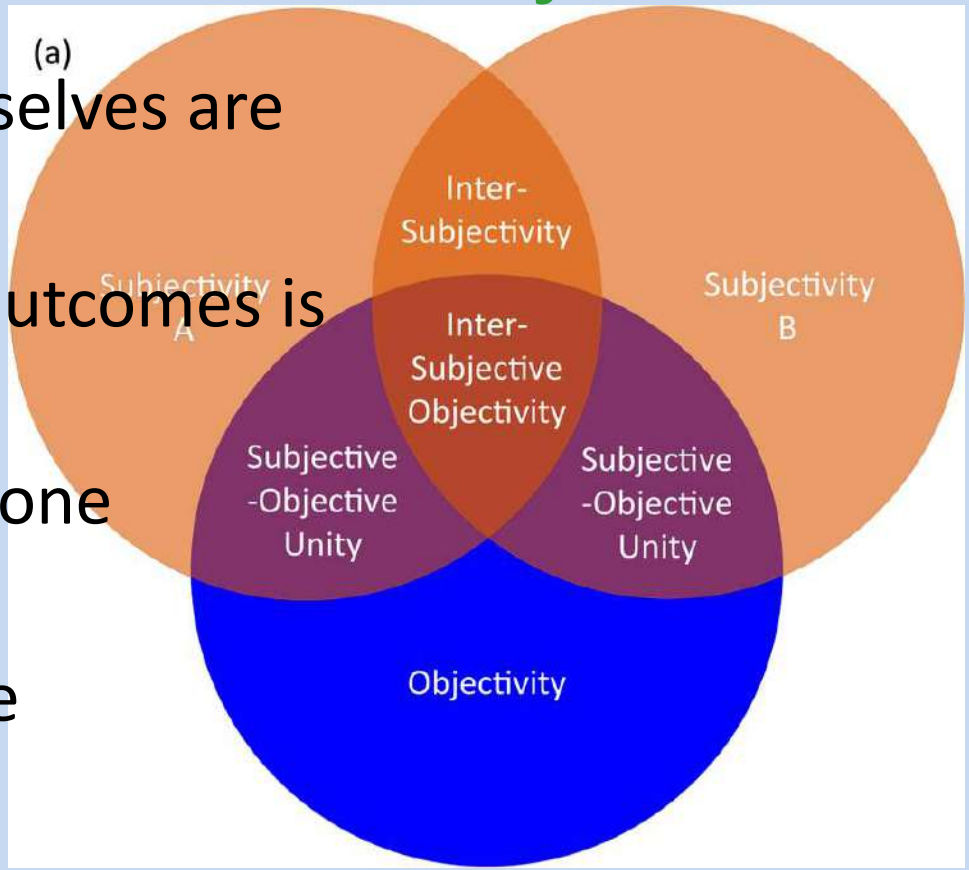
https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions

2. Learning Outcomes: additional remarks

- Learning outcomes: coherence or professor's hobbies?
- Start at discipline or: Labour market → Degree profile → Learning Outcomes → Curriculum
- Maybe: "tasks/roles" approach (mix of competencies)

3. Learning Outcomes: subjective, at best inter-subjective

- Learning Outcomes themselves are subjective
- Assessment of Learning Outcomes is subjective
- Intersubjectivity: not just one person
- Triangulation: not just one assessment method



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