# Learning Outcomes at Université du Luxembourg

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## Short presentation of UL

### Who are we?

- Created on August 12th, 2003
- The one and only in Luxembourg
- Public establishment

### Our mission

- International and high level education and research
- Research focused with priorities
- Innovative, creative, interdisciplinary research and education
- Multilingual, European, promoting cultural diversity
- Encourage “mobility” of staff and students

## Study structure

Professional life

↔ PhD

↑

↔ Master
academic / professional
120 ECTS
30 ECTS by semester

↑

↔ Bachelor
academic / professional
180 to 240 ECTS
mandatory mobility
30 ECTS by semester

## Faculties

Three faculties

- Faculty of Science, Technology and Communication
- Faculty of Law, Economics and Finance
- Faculty of Language and Literature, Humanities, Arts and Education

## Some facts 1

- 11 Bachelor programmes
- 17 Master programmes
- 210 PhD students
- All together 560 staff members
- 4100 students
- Budget 70 Mio €/year

## Some facts 2

- All programmes in the Bologna scheme (BA 180-240 ECTS; MA 60-120 ECTS)
- Mobility abroad:

  mandatory for all BA students

- Work-load for students 25-28 h /1ECTS

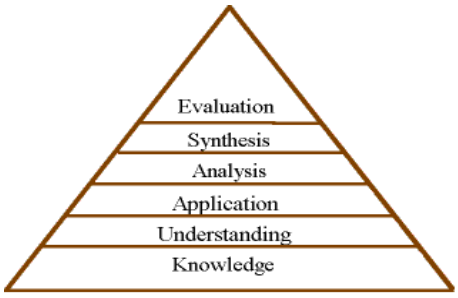
## Introducing Learning Outcomes at the University of Luxembourg

- LO: defined as specific goals of a programme /module /course
- Definition adopted:

  LO are statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning (Donelly&Fitzmaurice, 2005)

## Taxonomy

- Referring to a taxonomy (classification based on a range of criteria)
- Suggested taxonomy: Bloom 1956



# LO related levels and domains

Cognitive domain and levels

- Knowledge & understanding
- Higher Cognitive competences

Active/practical domain (psychomotor)

Affective domain (attitudes, beliefs, values, …)

General / transversal competences:

communication, problem solving, self-evaluation, …

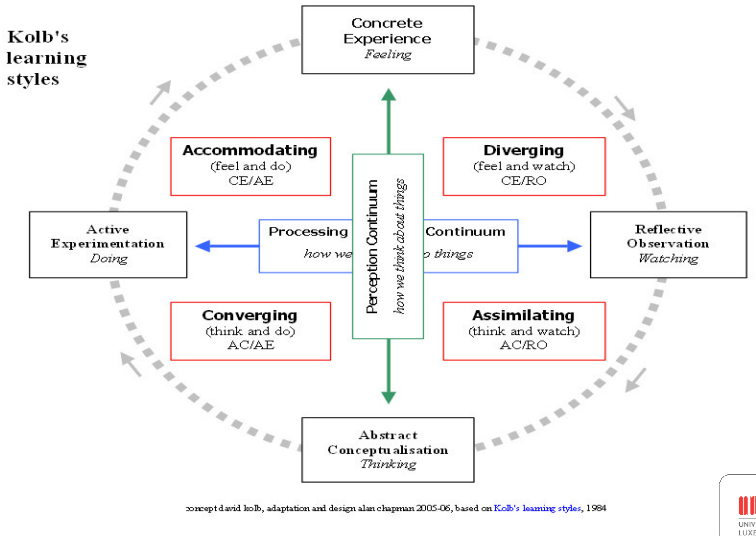
# Codifying by using action verbs, making observable and measurable

- ***Knowledge***: arrange, define, duplicate, label, list, memorize, name, order, recognize, relate, recall, repeat, reproduce state
- ***Comprehension***: classify, describe, discuss, explain, express, identify, indicate, locate, recognize, report, restate, review, select, translate
- ***Application***: apply, choose, demonstrate, dramatize, employ, illustrate, interpret, operate, practice, schedule, sketch, solve, use, write
- ***Analysis***: analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test
- ***Synthesis***: arrange, assemble, collect, compose, construct, create, design, develop, formulate, manage, organize, plan, prepare, propose, set up, write
- ***Evaluation***: appraise, argue, assess, attach, choose compare, defend estimate, judge, predict, rate, core, select, support, value, evaluate

# Why using Blooms taxonomy?

- Gives a structure for levels of competence
- Founded on the idea of learning processes with ongoing complexity
- Might be used by “not-specialists”
- Might be used in different areas

# Other taxonomies?
# Kolb’s experiential model



## Difficulties in switching to LO at UL

- New creation + merger of 3 former HEI
- Heritage from “academic” tradition:
  - Essentially content oriented programmes
  - Focussing on disciplines more than on students
  - Little interaction with business world
- Coordinating the views of new staff coming from many different countries and “old” staff, i.e. various academic traditions
- Most BA/MA programmes set up without explicitly considering LO
- Mandatory mobility: coordination with external partners

## Advantages of LO for UL

- Link to European context: European qualification framework (EQF)
- Link to the definition of competences at primary and secondary level
- Programmes still under development
- Some programmes already defined in terms of competences
- Good visibility of UL
- Strengthen ongoing quality assurance process
- Demand of political and economic stakeholders

## Advantages for students

- Guidance in their learning process
- Clarification of study expectations
- Clear understanding of the requirements to be successful in study programmes
- Possibility to monitor their progress at different stages of the study programme
- Facilitation of recognizing mobility & transfer

## Advantages for academic staff

- Move away from simply content-oriented approaches
- Focus on intended outcomes
- Articulate explicit requirements
- Reinforce alignment between goals and assessment criteria
- Rethink the aims of programmes
- Rethink university pedagogy

## Advantages for stakeholders

- Give more visibility to academic programmes
- Enhance transparency
- Take into account the needs of the employment market
- Allow comparison between similar programmes
- Provide supplementary accountability

## Implications on teaching 1

- Enhance student centred methods
  - From passive consumer attitude to active autonomy/self-responsibility
  - From model learning to problem solving strategies
  - From individual studying to collaborative learning
  - From theoretical assessment to observable and measurable actions

# Implications on teaching 2

***Links with mastery learning***

- *Curriculum:* not focus on content, but on the process; curriculum based on learning objectives organized into smaller, sequentially organized units.
- *Instruction:* successful tutoring; frequent and specific feedback regularly correcting mistakes made by students (continuous, formative and summary evaluation)
- *Assessment:* tests are mostly criterion-referenced rather than norm-referenced. Mastery learning ensures numerous feedback loops.

# Hesitations 1

- Weakness of theoretical background
  - Taxonomies (Bloom, De Landsheere, Kolb, …)
  - Reliability? Validity? Evidence of pedagogical impact?
- Reintroduction at university level of concepts used in the 1980's (mastery learning)
- Risk of reducing the complexity of academic learning simply to skills
  - going back from the more generic term of "competences" to "skills"
- Blue-eyed belief that assessed skills will match the complexity of occupational areas

## Hesitations 2

- Risk that certain aspects could be forgotten or neglected, notably:
  - Autonomy:
    assignments could be too clearly defined
  - Contextualisation:
    reflection, decision making within uncertain contexts, adaptation
  - Knowledge transfer:
    problem-solving abilities, dealing with complexity
  - Social skills:
    leadership, team work,…
  - Values/affective components:
    solidarity, loyalty, …

## Challenges 1

- Changes of paradigm:
  - from content to complex LO
  - Concern about students
  - Concern about learning at academic level
  - Passive versus active and interactional roles
  - Individual – collaborative learning
  - Professor ≠ only owner of the process

## Challenges 2

- Academic staff has to be concerned about pedagogical issues
- Weakness of many actual HEI
- Number of students; ratio students/teachers
- Introduction of CPD for teaching staff
- Involve student associations in the process
- Revolution in the academic field

## Some conclusions 1

- Common goals:
  - Adopt shared (meta)-framework of qualifications with specific levels defined at Bergen conference, 2005
  - Implement on voluntary basis
  - Refer to learning outcomes
  - Adopt quality assurance principles (Budapest conference, 2006)

## Some conclusions 2

- Enhance theoretical background of LO
- Avoid downgrading the complexity of academic learning
- Think about links between academia and business world for developing transversal aptitudes
- Don't repeat the errors of the 1990's (of operationalizing every educational goal into mini-steps)
- Limit the number of LO per module (2-5: keep to the core competences)

## Some conclusions 3

- Rethink educational practice in HE (active methods, portfolio, production, tutoring, …)
- Rethink assessment methods
- Associate with other HEI

## Ongoing

Richness of tomorrow is created today