



# Learning and Innovation

*What does it mean at the  
University?*

**ECIU Masterclass**

**19 th - 20 th September 2016**

**Lodz University of Technology**



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# Two terms and two challenges

1. „Learning” and „ability of learning”
2. „Innovation” and „skills for innovation”



# System based on „learning outcomes”

- *‘learning outcomes’ means statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence*  
(EQF recommendation, April 2008)
- We have system „based on learning outcomes”
  - We define, write, describe **learning outcomes** for the study programme and it’s educational components
  - We teach students to achieve **learning outcomes**
  - We assess **learning outcomes**
- Sometimes we are not satisfied with students’ learning
  - We have taught them but they didn't learn
  - We have supported students’ learning but ....
  - They didn't’ achieve **learning outcomes**, why?



# Learning to learn

- Are we sure students have ***ability to learn?***
- Have we written, in study programme, the learning outcomes concerning ***ability to learn?***
- Can we point out courses students ***learn to learn?***
- Do we support development of ***skills for learning?***
- Do we assess ***learning skills*** according to the level of qualification?



# „Learning”

## in Polish Qualification Framework (*for LLL*)

PQF – Skills – a person is able to:

Level 1-2. – learn under direct guidance in a structured form

Level 3. – learn partially autonomously under direct guidance in a structured form

Level 4. - learn autonomously under direct guidance in a structured form

Level 5. - learn autonomously

Level 6 – (I cycle) – Autonomously plan one’s lifelong learning

Level 7 – (II cycle) - Autonomously plan one’s own lifelong learning and direct others in this area.

Level 8 – (III cycle - PhD) – Autonomously plan one’s own development as well as inspire development of others.



# Lifelong learning perspective (XXI century)

- The most important learning outcome at any level of education is development of **ability to learn** (*in formal, non-formal context and informal learning*)
- How to help students to be prepared for LLL, **to be able to learn?**
  - To learn every day, to learn at the workplace, to learn from experience



# „Innovation” at the University

- We develop *innovations* (by research)
- We transfer *innovations* to society and economy
- We implement *innovations* in university
- We develop *innovative* study programmes
- ....
- ....
  
- Do we help students to develop „*skills for innovation*”?



# Skills for innovation

- Skills for innovation – *21st century skills*\*
  - Technical Skills including disciplinary know-what and know-how
  - Thinking and creativity skills
    - Curiosity, critical thinking, problem solving and making connections, open-mindedness, critical questioning ..
  - Social and behavioural skills
    - Interest, engagement, self-directed learning, self-confidence, organisation, communication (cross-cultural) collaboration, teamwork, leadership ...

\* OECD/CERI Innovation Strategy for Education and Training: [www.oecd.org/edu/innovation](http://www.oecd.org/edu/innovation)





# „Innovation” in the EQF for LLL

- **Level 6 (I Cycle)**
  - Advanced skills, demonstrating mastery and **innovation** .....,
- **Level 7 (II Cycle)**
  - Specialised **problem-solving** skills required in research and/or **innovation**.....
- **Level 8 (III Cycle – PhD)**
  - The most advanced and specialised skills and techniques ....., required to **solve critical problems** in research and/or **innovation**



# What we have to do..... ?

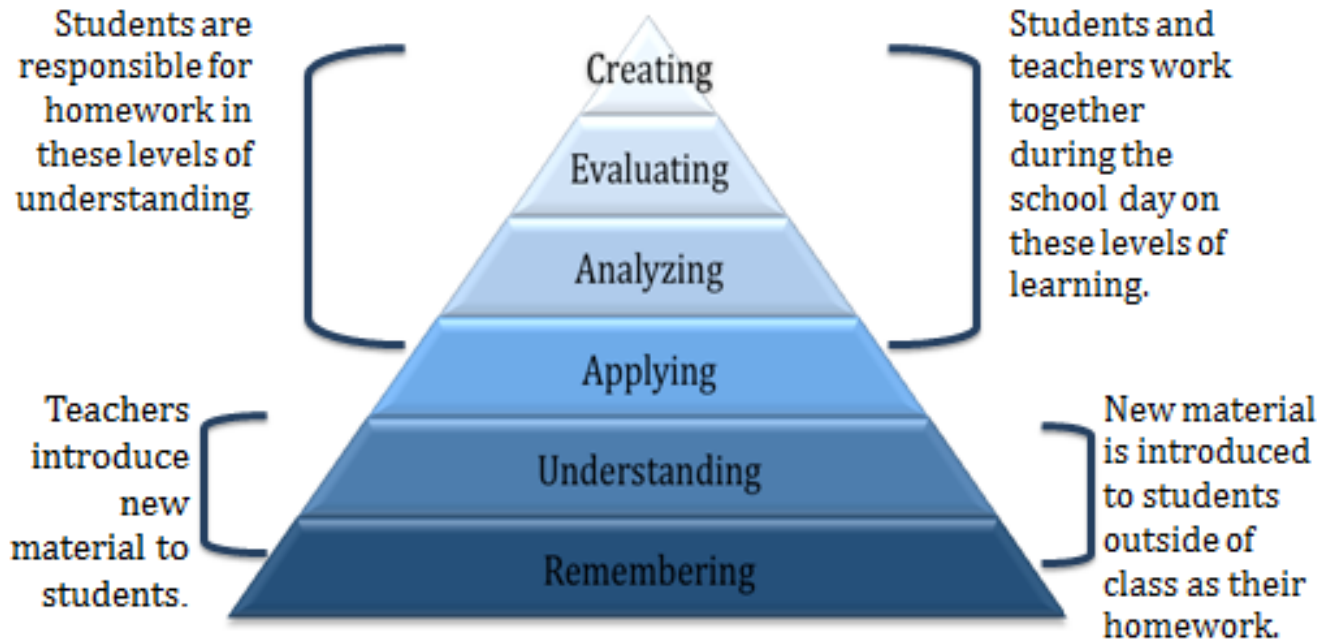
- Write appropriate learning outcomes
- Help students to develop this learning outcomes
  - Teaching and learning methods
  - „flipped education”
- Assess this learning outcomes
  
- How to do this ....??????



# „Flipped learning” How to implement it?

## Traditional Model

## Flipped Model



## Blooms Taxonomy

Source: Williams, B. (2013). *How I flipped my classroom*. NNNC Conference, Norfolk, NE



# What we have to do..... ?

- Write appropriate learning outcomes
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  - „flipped education”
- Assess this learning outcomes
  
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I wish you a fruitful discussion