#### **DEEM – Recap**

#### Wageningen DEEM team

Mattijs Smits, <u>mattijs.smits@wur.nl</u> Omid Noroozi, <u>omid.noroozi@wur.nl</u> Hansje Eppink, <u>hansje.eppink@wur.n</u>





### Recap of key topics first training

- Constructive alignment
  - Learning outcomes
  - Teaching and learning activities
    - innovative teaching methods
    - teacher/student centred learning
    - ICT in education
  - Assessment
- Competence-based education

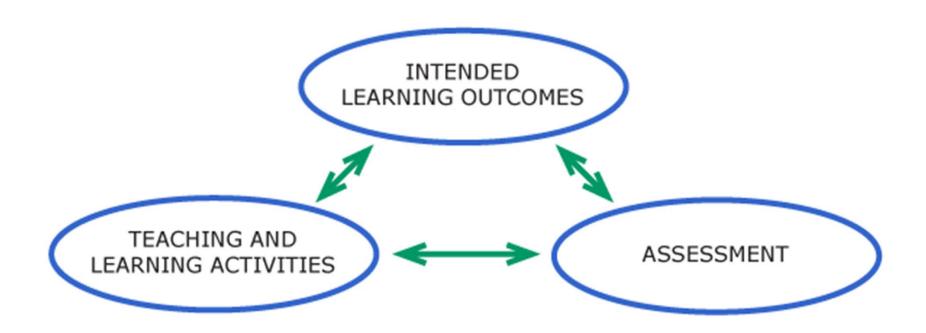


# What do you remember from last workshop?





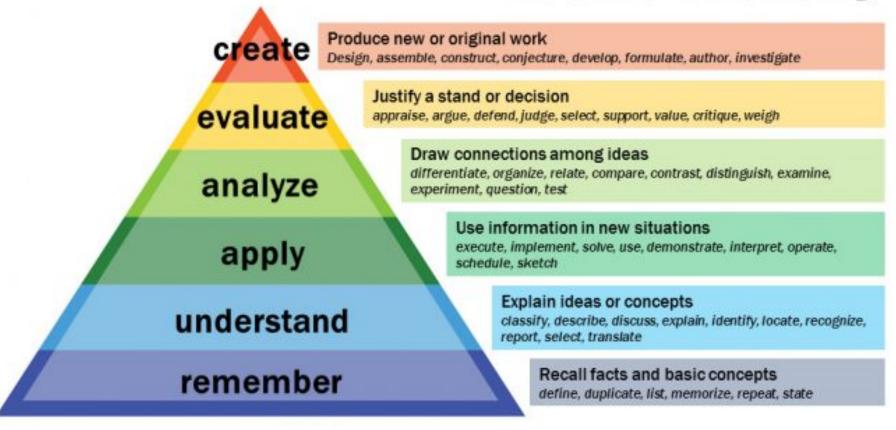
# Alignment of learning outcomes, learning activities, assessment





### Learning outcomes

## **Bloom's Taxonomy**





#### Participatory & innovative teaching methods

- Apply constructive learning theories
- Be a facilitator, mentor, guide (lecturing!)
- Use group work & discussions
- Group formation (homogenous, heterogenous or random)
- Cooperative or collaborative?
- Assign and rotate roles
- Use world cafe
- Concept map/concept mind
- Asking questions
- Rules (attendance?! sticking to time, mobile use, support claims, no interuptions, drinking & eating, tags)



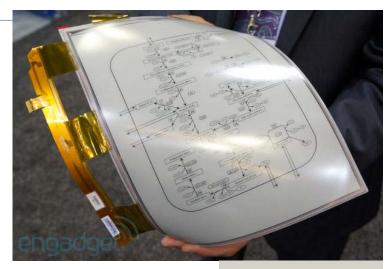
#### Participatory & innovative teaching methods

- Use problem-based learning
- Use peer feedback
- Use energizer
- Use bonus points
- Use brainstorming
- Encourage argumentation and reasoning
- Voting system
- Demonstration
- Fieldtrip
- Video clips
- Use ICT & online environments (Edmodo, moodle?)



#### ICT and Education - Michael Poh

- Virtual Reality (VR)
- Augmented Reality (AR)
- Flexible Displays
- Multi-Touch LCD Screens
- Biometrics: Eye Tracking
- Online Social Networking



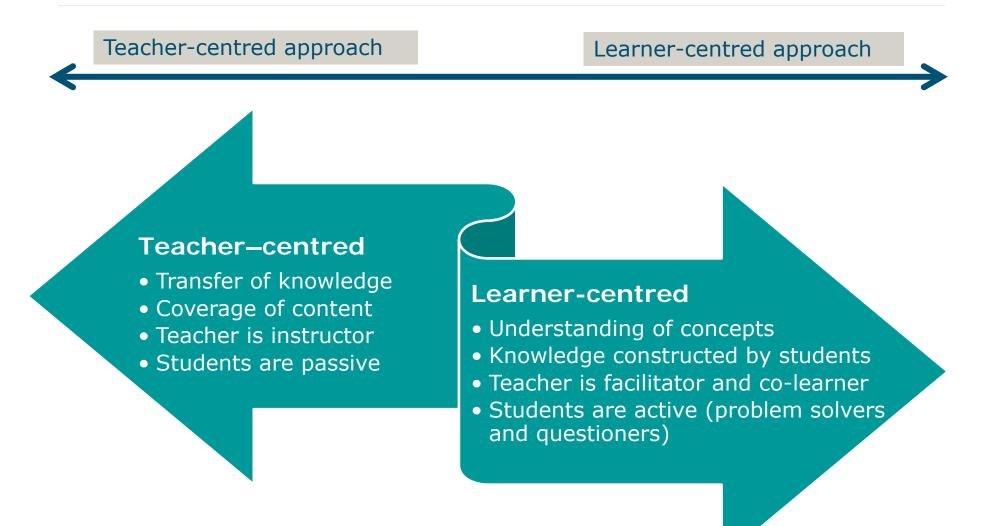
(Source: engadget)

(Source: theregister.co.uk)



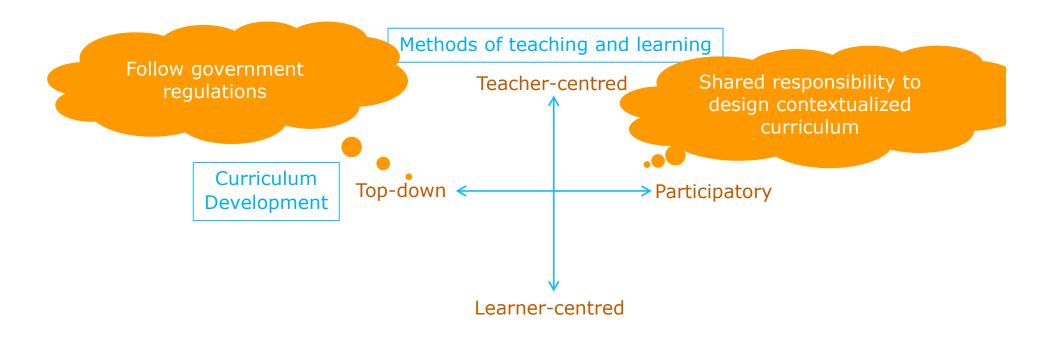


#### Teacher-centred and Learner-centred approach





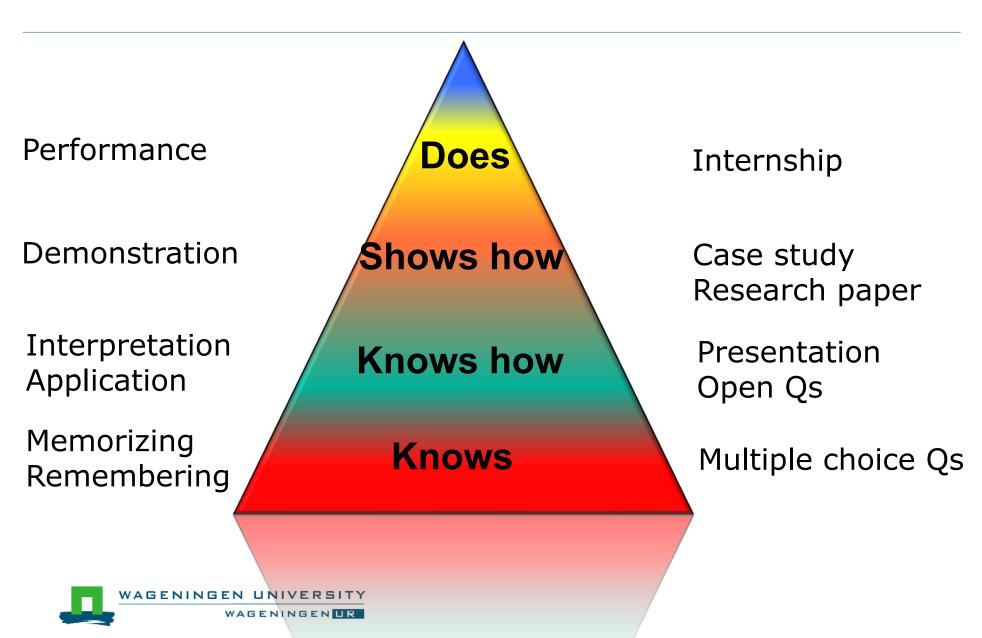
# Shifting mode of curriculum development and teaching?





How much we remember after two weeks... **ACTIVE** SIMULATING THE REAL EXPERIENCE, receiving & participating DOING A DRAMATIC PRESENTATION PARTICIPATING IN A DISCUSSION, **GIVING A TALK** WATCHING A MOVIE OR A DEMONSTRATION, **SEEING IT DONE ON LOCATION LOOKING AT PICTURES HEARING WORDS READING A BOOK OR AN ARTICLE PASSIVE** receiving 40 50 70 10 20 30 60 80 90 100

#### **Assessment: Miller's Pyramid**



#### Using rubric as assessment form

A rubric is a coherent sent of criteria for students' work that includes descriptions of levels of performance quality on criteria

Purpose: To assess performance and to provide feedback.

Instead of judging the performance it describes the performance.

Why are rubrics important:

- It is a tool to give performance feedback
- Increases transparency of the assessment



#### What kind of room is this?



#### Principles of competence-based education

- 1. Competencies for the curriculum are defined
- 2. Vocational core problems are central
- 3. Competences assessed before, during & after
- 4. Learning takes place in authentic situation
- 5. Head, heart & hands
- 6. Self-responsibility and reflection
- 7. 'Teachers' both in and outside educational institution fulfil role as coach and expert
- 8. Foundation for life-long learning





#### Competence 1.0 – for closed activities

# Detailed listings of behaviors, e.g.:

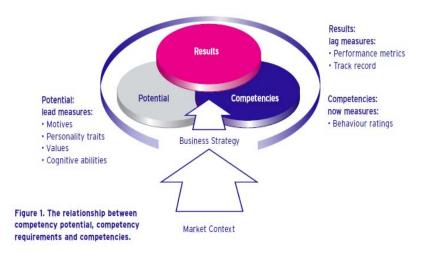
- Teaching behavior
- Keep attention of students
  - Walk up and down the classroom
- Keep oversight over the group
  - Stand in the corner of the classroom





#### Competence 2.0 – for known jobs

- Jobs
- Responsibilities
- Core tasks
- Work processes
- Activities



#### The Great Eight

- Leading and Deciding
- Supporting and co-operating
- Interacting and Presenting
- Analysing and Interpreting
- Creating and Conceptualising
- Organising and Executing
- Adapting and Coping
- Enterprising and Performing



#### Competence 3.0 – for unknown future

- Ambiguity handling
- Argumentational reasoning
- Critical thinking
- Dealing with wicked (complex) problems
- Communication
- Resilience
- Creativity
- Entrepreneurship





#### Challenges of competence 3.0

- Connectivity between school and industry (i.e. internship, attachment)
- Changing teacher roles (experts, coach, assessor, developer, researcher and manager)
- Management at university level has to support it
- Teacher training
- How to create a learning organisation in which teachers see opportunities to makes more connections with industry and change elements of their teaching





### What have you done?

- Form small groups (3-6), including people who were there last time and those who were not
- Explain how you have integrated aspects from the previous workshop in your teaching.

