

Competence based teaching and learning

NMS - February 8th 2016



TABLE OF CONTENTS

- ▶ Learning goals and approach?
- ▶ Why?
- ▶ WHAT?
- ▶ Challenges and difficulties?
- ▶ A powerful (E-)learning environment?
 - ▶ Criteria?
 - ▶ Role trainer?
 - ▶ Role trainee?
 - ▶ BLEND!
- ▶ A competence based assessment framework?
- ▶ A tool: matrix competence focused training (University Wageningen)

Learning goals and approach



▶ GOALS:

- ▶ To acquire knowledge of new CBL concepts
- ▶ To acquire new insights concerning CBL
- ▶ To reflect on new CBL concepts and insights for your own training practice
- ▶ To get inspired by CBL concepts and insights
- ▶ To be able to screen your own practice on its CBL level by the use of 10 principles
- ▶ ...(fill in)

▶ APPROACH:

- ▶ BLEND of steering and interactive methods

Why?



- ▶ A need to match education with present-day needs of society (Constructivism, Human Capital theory, Human Resource management - OESO, Dutch board of education,...)
- ▶ People need to be:
 - ▶ ‘Broadly’ employable;
 - ▶ Be able to handle target-oriented in varied and new situations (transfer);
 - ▶ Be able to develop knowledge and skills by themselves;
 - ▶ Be an expert AND be (a):
 - ▶ Team player, communicator, problem solver, self regulator, critical thinker, digitally literate, creative, ... **21st century skilled!!!**
- ▶ ‘BROAD’ PROFESSIONALS - LIFE LONG LEARNER!
- ▶ COMPETENCY BASED APPROACH!

WHAT?

- ▶ Competence/Competency: many definitions
- ▶ Common characteristics:
 - ▶ In context
 - ▶ Integration of knowledge, skills and attitudes
 - ▶ Changes in time
 - ▶ In the form of perceptible activities
 - ▶ Have to be learned or developed
 - ▶ Are in relation to other competences



Challenges and difficulties?

- ▶ To implement competences in vocational AND general education
- ▶ Competence based teaching and learning has to be implemented in the whole training (start-end)
- ▶ A suitable learning environment is needed!
- ▶ It requires a competence based curriculum!

Changing mindset of the instructor/ of the learner

Challenges and difficulties (2)

Traditional approach	Competence based approach
CONTENT (the same)	COMPETENCE (task based, flexible, realistic context)
STRICTLY ORGANISED	FLEXIBLE ORGANISATION
KNOWLEDGE/SKILLS	COMPETENCES (integration of knowledge, skills, attitudes)
TRAINER CENTERED	TRAINEE CENTERED
EVALUATION: TRAINER, KNOWLEDGE/SKILLS, PRODUCT (cognitive), SUMMATIVE (test culture), END	EVALUATION: ASSESSMENT (more assessors, more instruments, different moments), COMPETENCES, PRODUCT AND PROCESS, FORMATIVE (assessment culture), PERMANENT
STUDY UNITS: SEPARATE	INTERDISCIPLINARY STUDY UNITS

A powerful (E-)learning environment

<https://www.youtube.com/watch?v=NPvreKWaKjY>

- ▶ Learning is:
 - ▶ An ACTIVE process
 - ▶ A CUMULATIVE/CONSTRUCTIVE process
 - ▶ SELF-REGULATED/SELF-DIRECTED
 - ▶ TARGETED
 - ▶ CONTEXTUAL
 - ▶ CO-OPERATIVE



A powerful (E-)learning environment (2)

- ▶ Role TRAINER (Expert)
- ▶ (E-) Motivate
- ▶ (E-) Activate, (E-) organise
- ▶ (E-) Put into context
- ▶ (E-) Coach/ (E-) consult (**FEEDBACK!**)
- ▶ (E-) Moderate, facilitate
- ▶ (E-) Differentiate
- ▶ (E-) Create
- ▶ (E-) Team work,...
- ▶ BLEND!

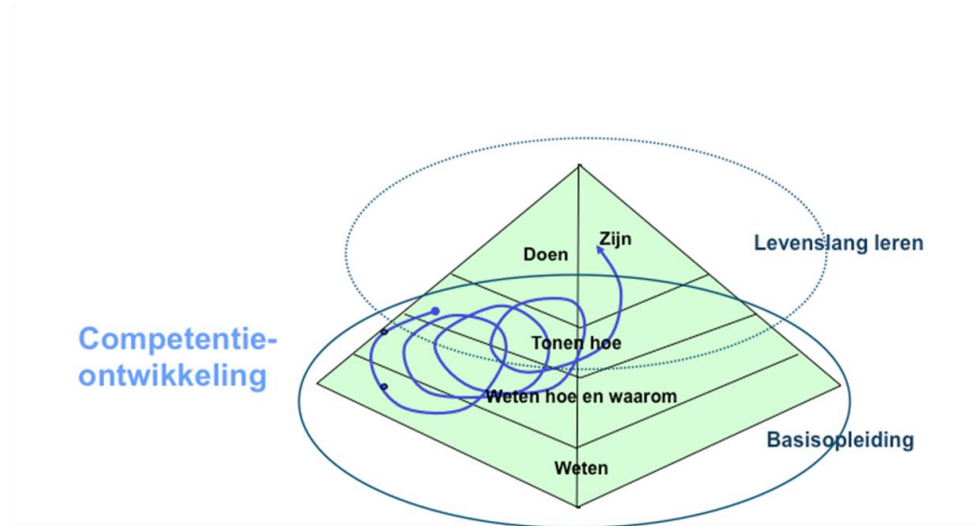
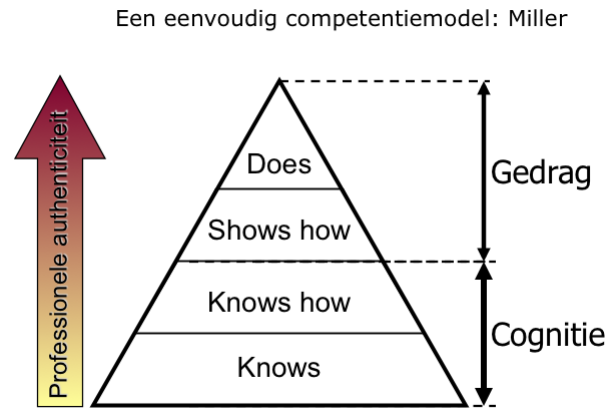
(ex. Group discussion, Problem based learning, case based learning, self-study package, project work, tasks, self tests, games,...)

- ▶ Role TRAINEE
- ▶ Take (E-) responsibility
- ▶ (E-) Participate actively
- ▶ (E-) Work in a collaborative way
- ▶ Formulate learning issues, in context
- ▶ Formulate learning actions (**FEED UP/ FEED FORWARD**)
- ▶ Formulate a learning path (personal development plan)
- ▶ INTEGRATE COMPETENCES!



A powerful (E-)learning environment (3)

► Competence model Miller



► FIND THE RIGHT “BLEND” for each level!

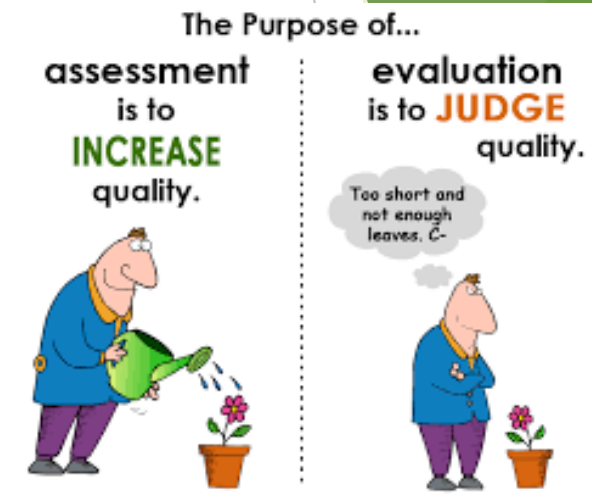
A COMPETENCE BASED (E-)ASSESSMENT FRAMEWORK?

▶ ASSESSMENT **FOR** LEARNING ↔ ASSESSMENT **OF** LEARNING

▶ **FEEDBACK + FEED-FORWARD!**

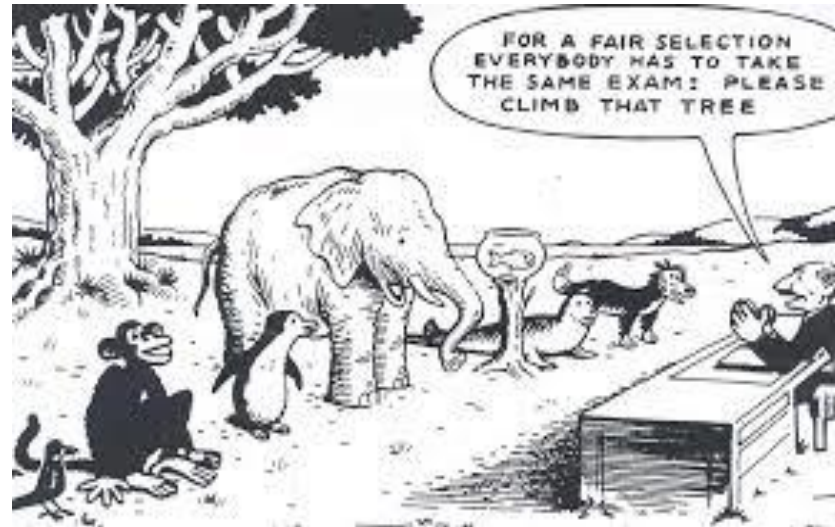
▶ CBL ASSESSMENT CHARACTERISTICS

- ▶ Adequacy (~ learning style, motivation, intelligence, interest, foreknowledge...)
- ▶ Integration (DURING the lesson - FEEDBACK + FEED UP + FEED FORWARD!)
- ▶ Teacher involvement (self-, peer-, co-evaluation)
- ▶ Knowledge construction oriented (problem solving skills, social skills, practical skills, regulation skills,...)
- ▶ Authentic
- ▶ Multidimensional



A COMPETENCE BASED (E-)ASSESSMENT FRAMEWORK?

- ▶ Other assessment forms
 - ▶ (E-) Checklist (observation)
 - ▶ (E-) Behavior description (observation, self)
 - ▶ (E-) Attitude scale
 - ▶ (E-) Conversation
 - ▶ (E-) Portfolio
 - ▶ (E-) Case
 - ▶ (E-) Report, (E-) Paper
 - ▶ (E-) Simulation
 - ▶ (E-) Presentation
 - ▶ (E-) Competence based interview
 - ▶ Internship
 - ▶ ...
 - ▶ FIND THE RIGHT BLEND!



A tool: matrix competence focused training

(University Wageningen)



- ▶ SCREENING INSTRUMENT: 10 PRINCIPLES
- ▶ 1. Core tasks, work processes and competences form the basis for the development of the training programme
- ▶ 2. Learning in and from practice is the starting point in the education programme/curriculum
- ▶ 3. Learning activities take place in different/diverse concrete meaningful, relevant and significant practice situations
- ▶ 4. Knowledge, skills and attitude are dealt with/are being discusses in the learning process as wel as in the evaluation process, in an integrated manner
- ▶ 5. Trainees are continuously assessed during education/training

A tool: matrix competence focused training (2)

(University Wageningen)

- ▶ SCREENING INSTRUMENT: 10 PRINCIPLES
- ▶ 6. There is a permanent reflection on the profession and the professional attitude
- ▶ 7. The curriculum is built in a way that allows a continuous increase of the trainee's self-direction
- ▶ 8. The trainee has a central position
- ▶ 9. The guidance (concerning content) is varied and adjusted to the learning needs of the trainees
- ▶ 10. Learning and professional competences are being stimulated

AT WORK!

- ▶ Screen your course/training based on the 10 principles (matrix).
- ▶ Motivate the level selected (concrete example(s)).
- ▶ Formulate 2 learning issues (aim: reaching a higher level).