

What do we know about
learning?

Film

- See the film:

Teaching teaching and understanding understanding

- https://www.youtube.com/watch?v=iMZA80XpP6Y&index=1&list=PLUvh8nBV_eO9ma_DggZiSGLnKb9hBZ5yO

Good and bad learning experiences

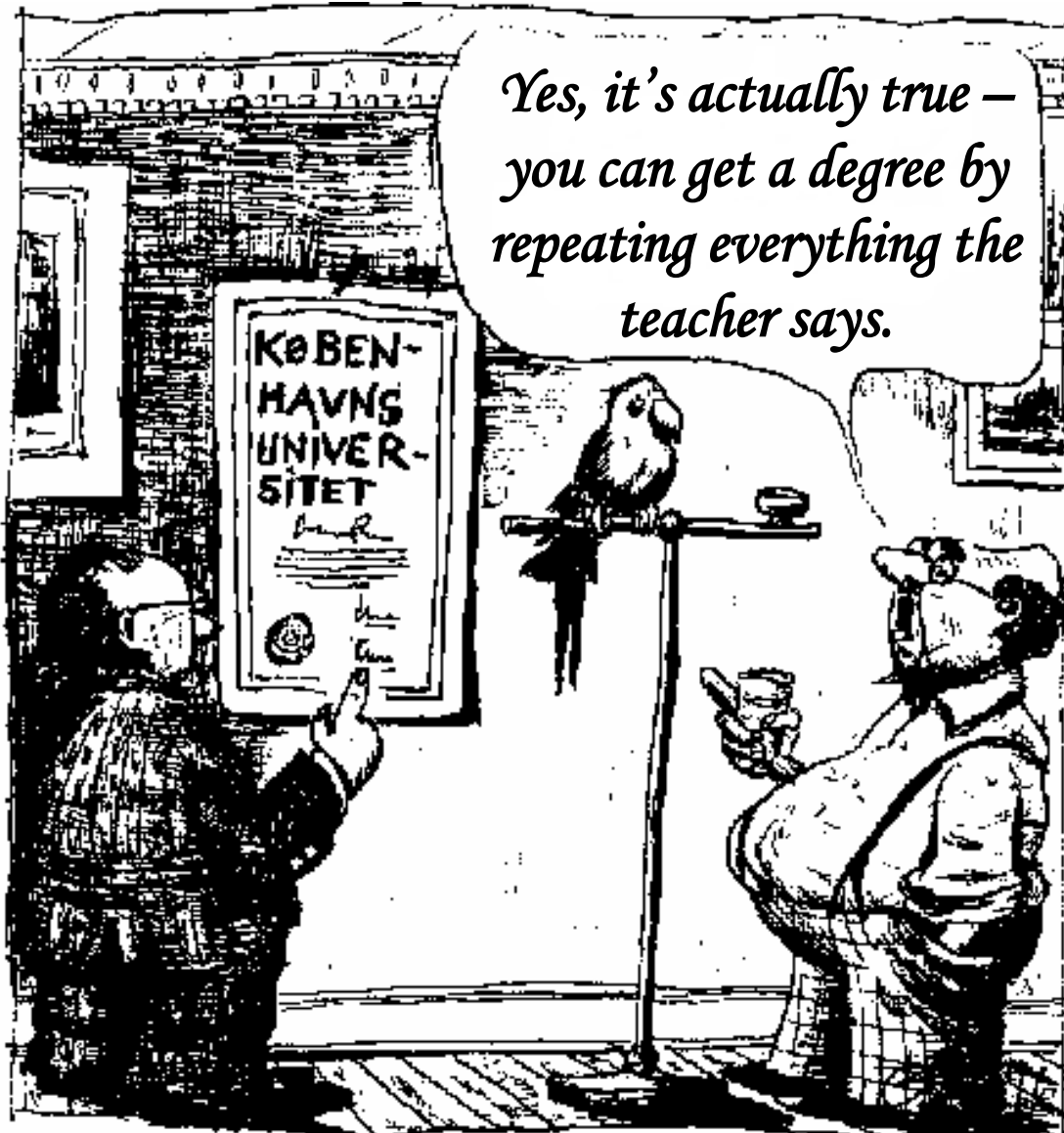
A Think – Pair – Share (TPS) activity

- **Think** of a good learning experience you have had as a pupil or student - what were characteristics of this experience?
- **Think** of a bad learning experience you have had as a pupil or student – what were characteristics of this experience?
- **Pair** with your nearest colleague and describe your experiences
- Please be prepared to **share** with everybody

Summing up on characteristics of learning

- Good:

- Bad:



Is this
learning?

***The psychological
mistake in learning:***

"We pretend that there is co-incidence between what is being taught and what is being learned"
(Knud Illeris, 1998)

Learning theories

- Social constructivism, incl.
 - Experiential learning – the Kolb cycle
 - Peer learning – zone of proximal development
 - Collaborative learning – communities of practice

Social constructivism

- **Learning** is the student's individual process of constructing knowledge and meaning, based on information inputs from many sources and in collaboration with others
- **Teaching** is the "setting up of a situation from which a motivated learner cannot escape without having learned" (*Cowan, 2003*) – teaching is not (only) lecturing but creating enabling and sustainable learning environments

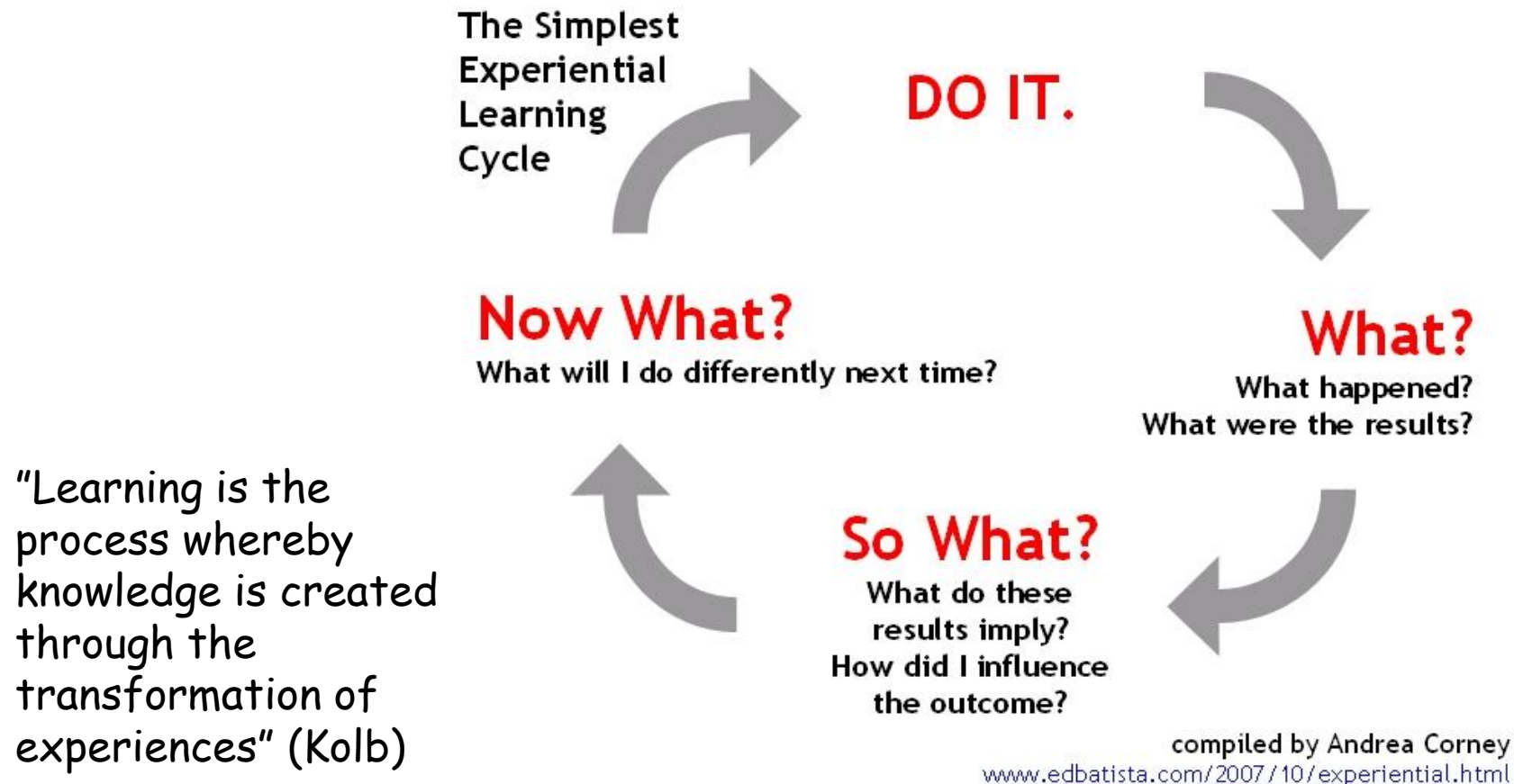
Lila M. Smith



Is this teaching?

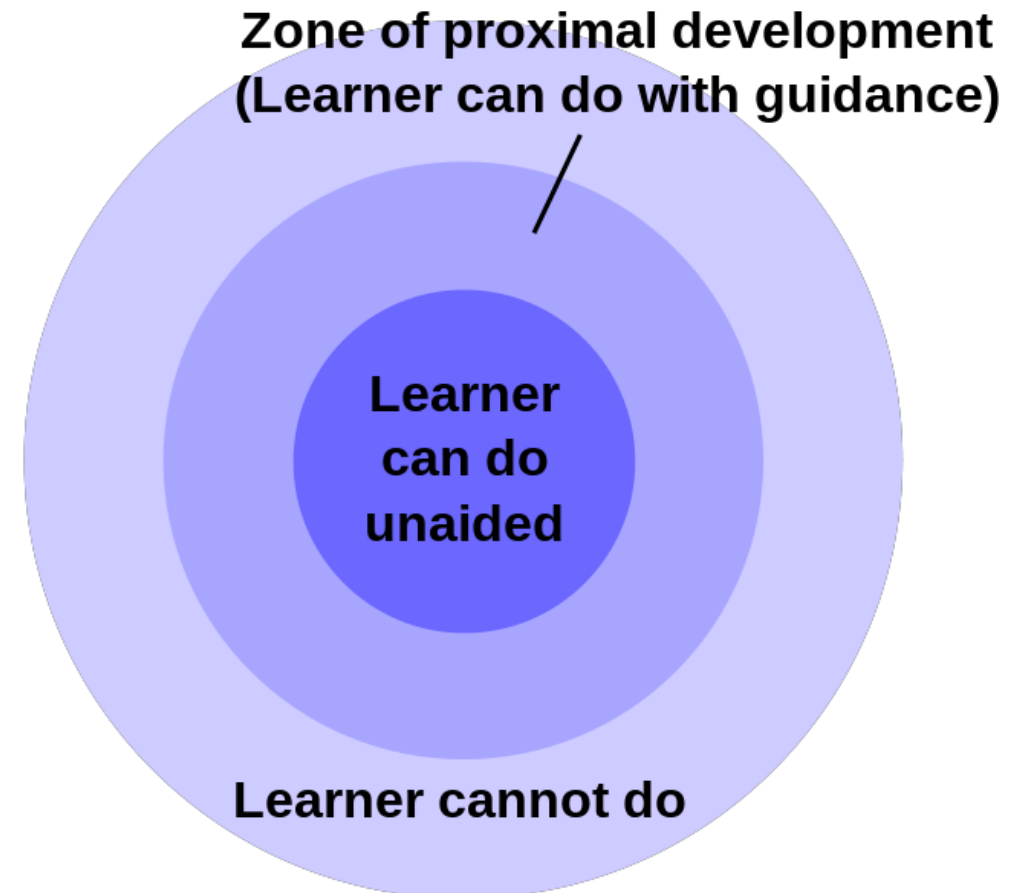
“Teaching does not mean transferring knowledge but creating opportunities for ...producing and constructing it.”
(Paulo Freire)

Experiential learning – the Kolb cycle



Peer learning – zone of proximal development

- Peer learning takes place in the ‘zone of proximal development’ which is
- “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in **collaboration with more capable peers**” (*Vygotskij 1978*)



Collaborative learning – communities of practice

- “Learning is a function of the activity, context, and culture in which it normally occurs, thus it is situated”
(Ref: Lave & Wenger 1991)



PBL – paradigm shifts

Paradigm shifts

PBL represents a paradigm shift at three levels:

1. Epistemological level
2. Educational management level
3. Teaching and learning level

1. Epistemological level

- From Mode 1 knowledge
 - disciplinary knowledge, hierarchically structured, produced by and for academia in the 'ivory tower', driven by quest for knowledge
- to Mode 2 knowledge
 - interdisciplinary knowledge, non-hierarchical, produced by stakeholders in and outside of university, driven by quest to solve local problems

A quote on knowledges

- *“..sustainability can only be achieved if ... institutions of higher learning interrogate **indigenous knowledges and practices** of sustainable development and articulate them with existing scientific and technological knowledges in order to generate policies and programs that are Africa-centred, and acceptable to the local people.”*

2. Educational management level

- From 'Inputs Based' Education (IBE)
 - focus on 'inputs', i.e, transmission of theoretical knowledge delivered through lectures based on textbooks and disciplinary needs for contents and coverage
- to Outcomes Based Education (OBE)
 - focus on 'outcomes', i.e. graduates' competences to create and apply practical knowledge in solution to real-life problems

The relation between OBE and PBL

- OBE is an educational system where focus is on students' achievement of outcomes and therefore on the student-centered learning process
- PBL is one of several student-centered approaches to teaching and learning in which the learning process is focused on achieving the learning outcomes
- Other student-centered approaches are team-based learning, project organised learning, etc.

3. Teaching and learning level

- From teacher centered Mode 1 knowledge transmission



- to student centered Mode 2 knowledge creation and application

3. Teaching and learning level

Shifting role of teacher:

- From lecturer transmitting knowledge
- to facilitator of creation and application of knowledge
- 'from the sage at the stage to the guide at the side'

Shifting role of student:

- From passive recipient of knowledge
- to active creator of knowledge that is applied to solve real-life problems