VIA University College
Campus Horsens

VIA / TCU 3rd semester workshop A2021

Problem Based Learning

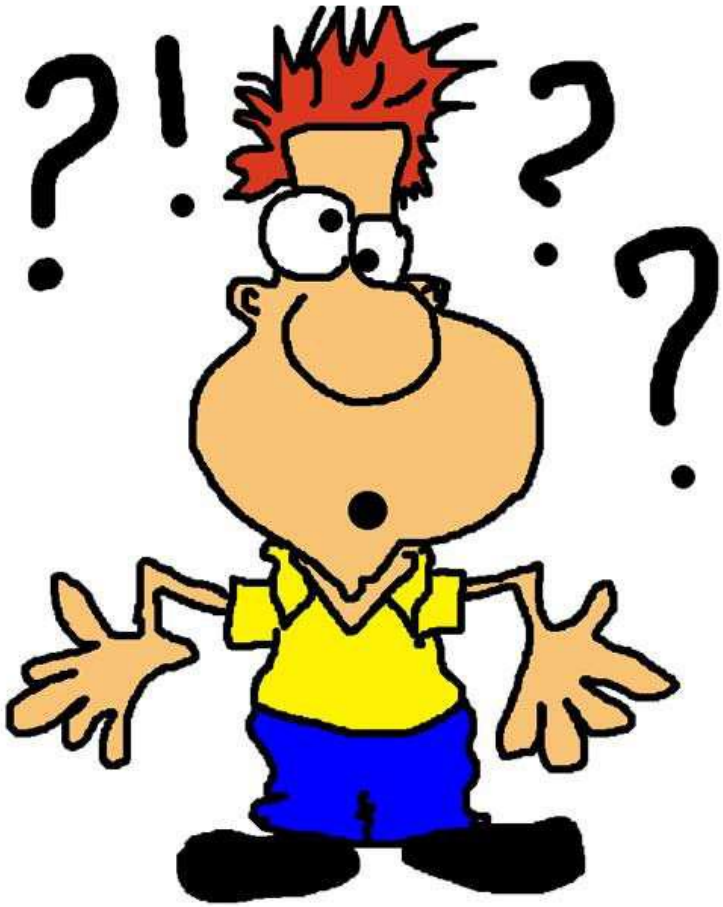
or

how to study at VIA



Problem Based Learning (PBL)

- What?
- Why?
- How?



What is PBL?

P (problem, project)

B (based, oriented)

L (Learning)



"New teaching method"

- The **students** (group) and the **content** (the thing to be learned) are **in the center** and the **students are very active**.
- The teacher supports the students.

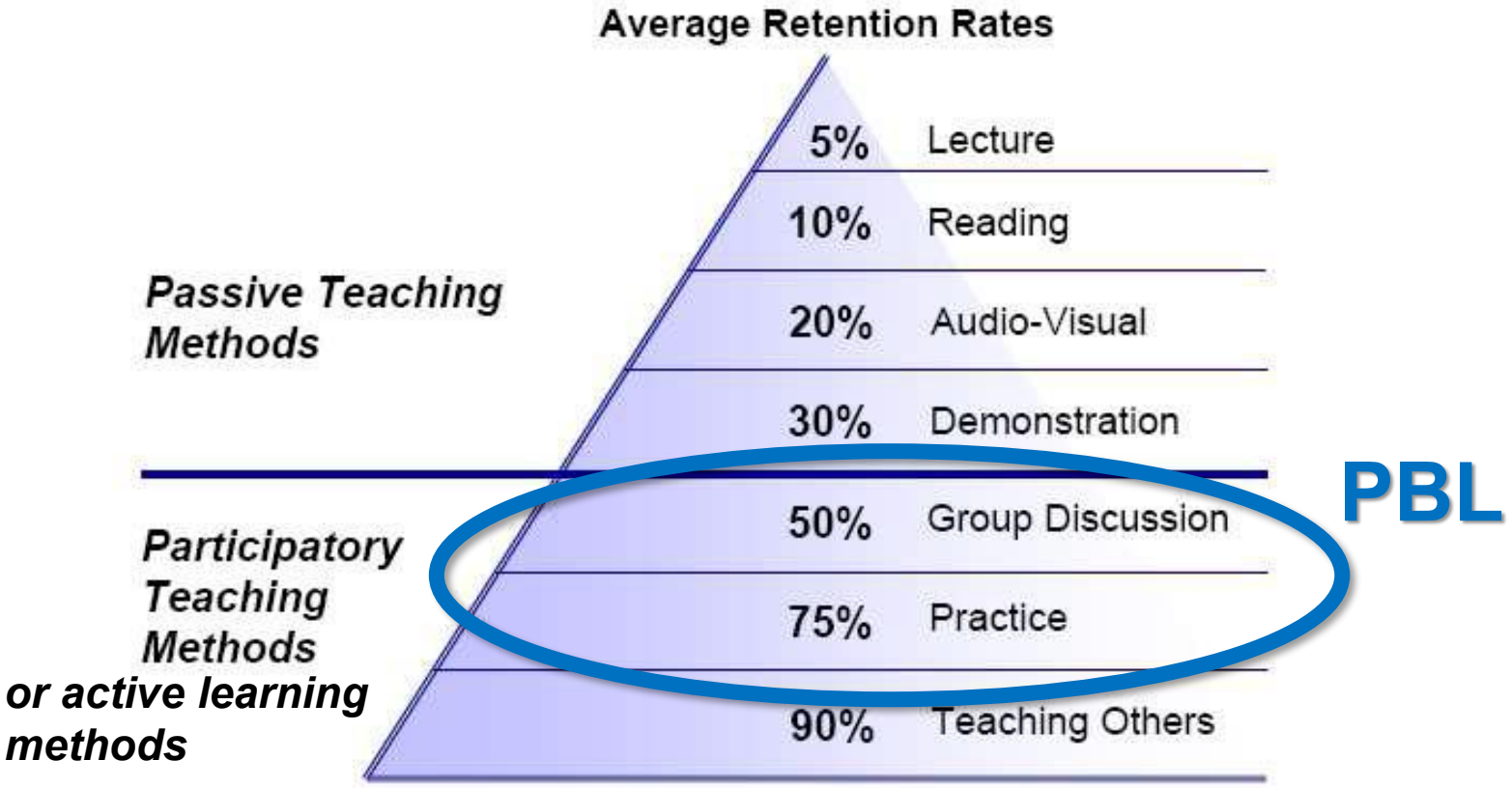


Traditional teaching method

- The **teacher is the center** and teach (speaks).
- **Students listen** and are **passive** lot of the times!



The Learning Pyramid*



*Adapted from National Training Laboratories. Bethel, Maine

Your brain have to work with the Con-tent (the thing to be learned) in order **to remember it!**

Active teaching methods



If your brain does not work with the content **you forget it very quickly!**

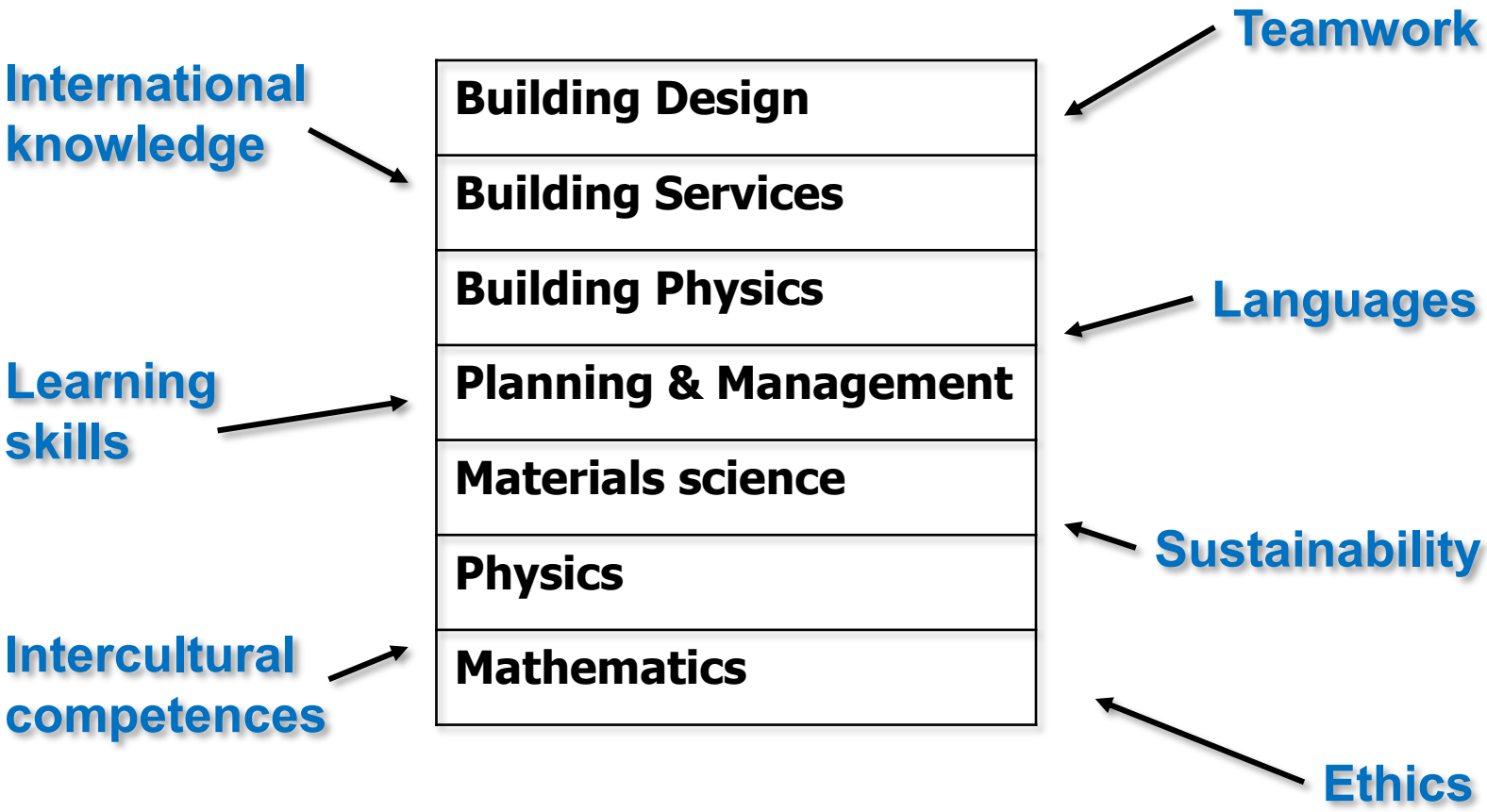
Passive teaching methods



Traditional subjects in the construction industry

Building Design
Building Services
Building Physics
Planning & Management
Materials science
Physics
Mathematics

New skills required in the construction industry



The rational behind the decision to change the educational system towards PBL, is a believe that some of the **new skills** needed in society, can be **developed during the studies** by applying **PBL**.



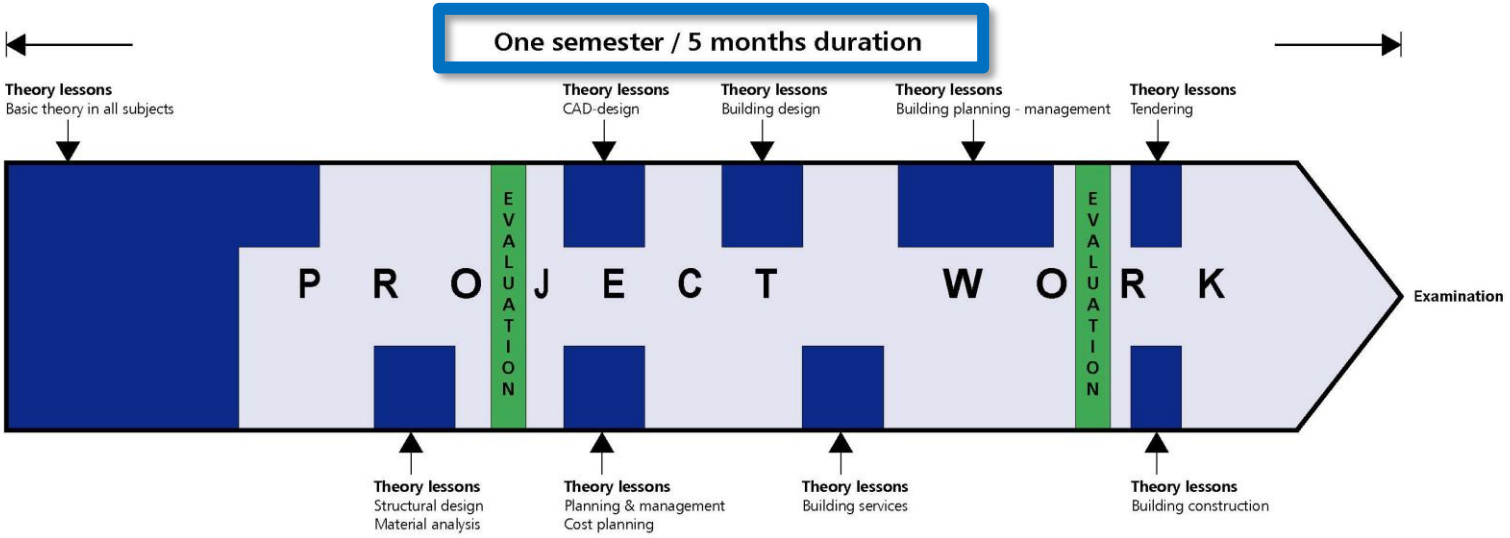
PBL is:

- Teaching strategy (a method)
- Student centred learning
- Group work – team organization
- Interdisciplinary tasks
- “Real Life” problems close to the Profession
- Systematic and effective evaluation

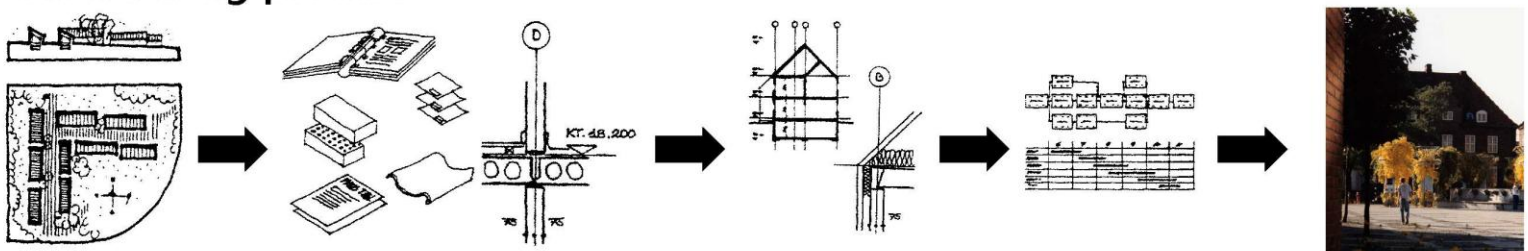




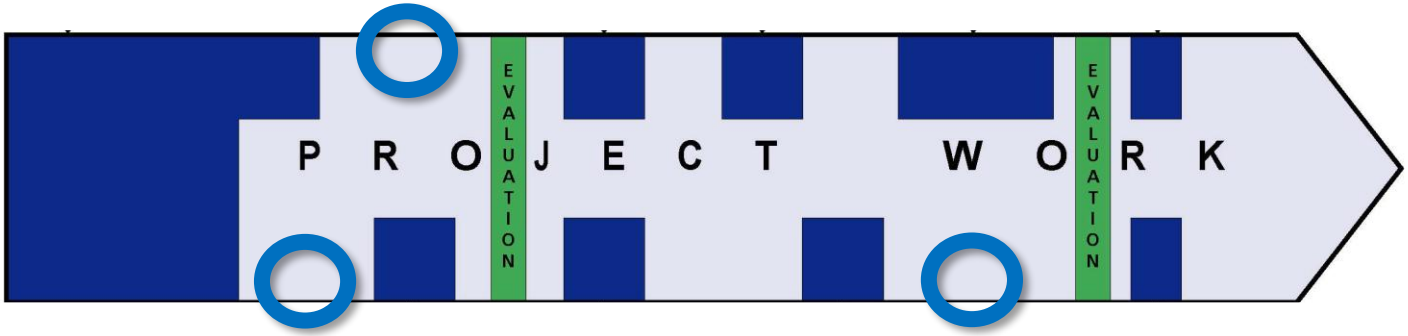
Project based teaching – in Denmark



The working process



Project based teaching – in China



VIA this semester at TCU

Small problems / tasks to solve in 1 - 3 days.

Not a total project – just small part of it.

Your role in PBL:

- **Study** and **perform** assignments **in collaboration** with fellow students in the **project group**
- **Ask questions** (after analysing the problems and possible solutions)
- Participate, **be active**



The **role** of the **professor / lecturer**:<<

- Possess knowledge (academic, process)
- **Assist in knowledge development**
- **Assist in the learning process**
- Ask questions
- Give time and space
- **Step back**
- **Give up the "Kingdom"**
- Make links to sources



Evaluation

- The **learning** outcome
  Individual/group
- Project / **work process**



Assessment

- Exams (Written and oral / spoken)
- **Project presentation and defence**
- In groups but individual marks

Thank you for your attention

Have a pleasant **PBL journey**!



Use your brain



Teamwork