

Problem Based Learning POPBL - way of motivation

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Content

- Why POPBL
- What is POPBL
- How to design a project
- POPBL and the students/pupils
- POPBL and the surroundings





POPBL as learning method

Learning is an active process

We can present some knowledge for the students/pupils, but we can't learn for them

In the POPBL method the students learn how to learn

Why POPBL in schools?

- Because
- Working with a project is motivating for the pupils/students
- The pupils/students are a part of the lessons
- The pupils/students learn how to learn
- The pupils/students pick up more knowledge
- The pupils/students remember what they have learn

POPBL as learning method

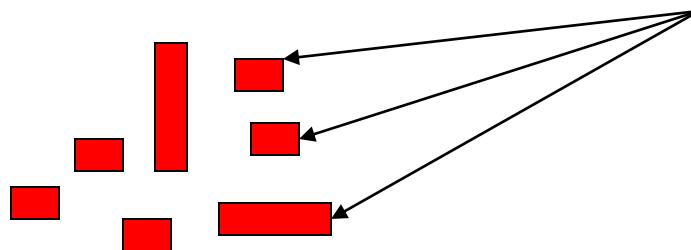


The students/pupils are responsible for their own learning

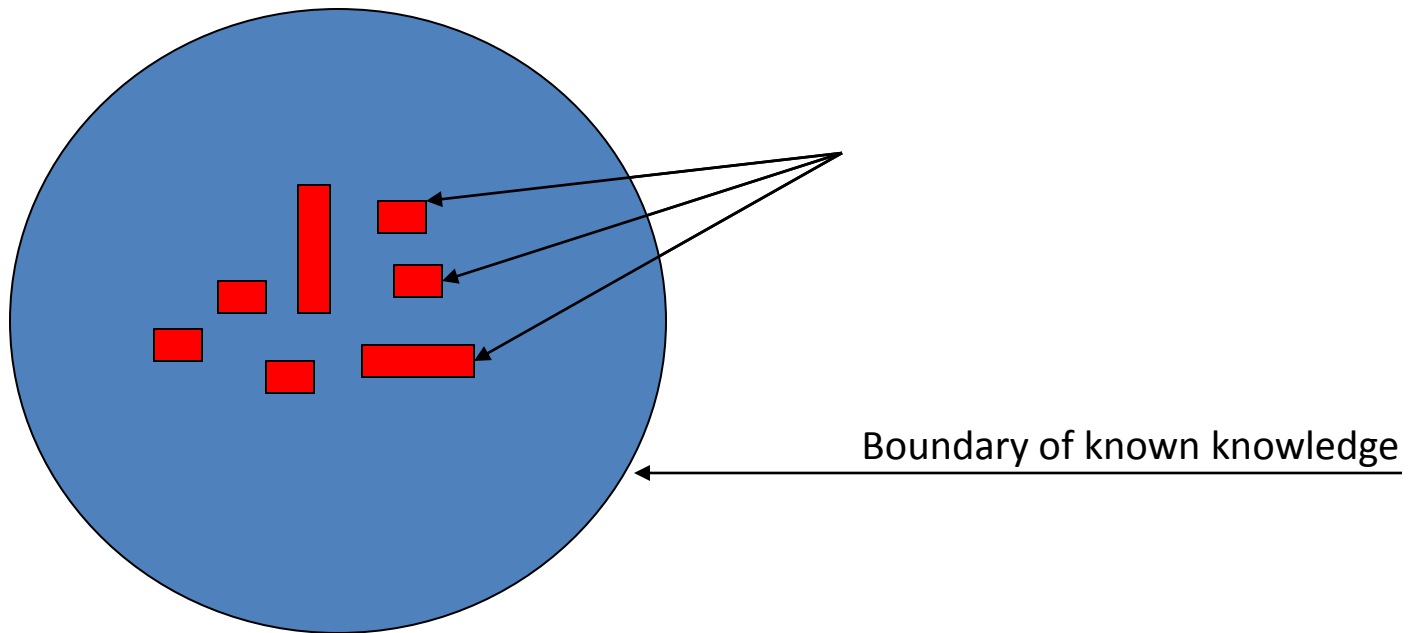
Of course they get some help, but the learning is their responsibility

Why POPBL?

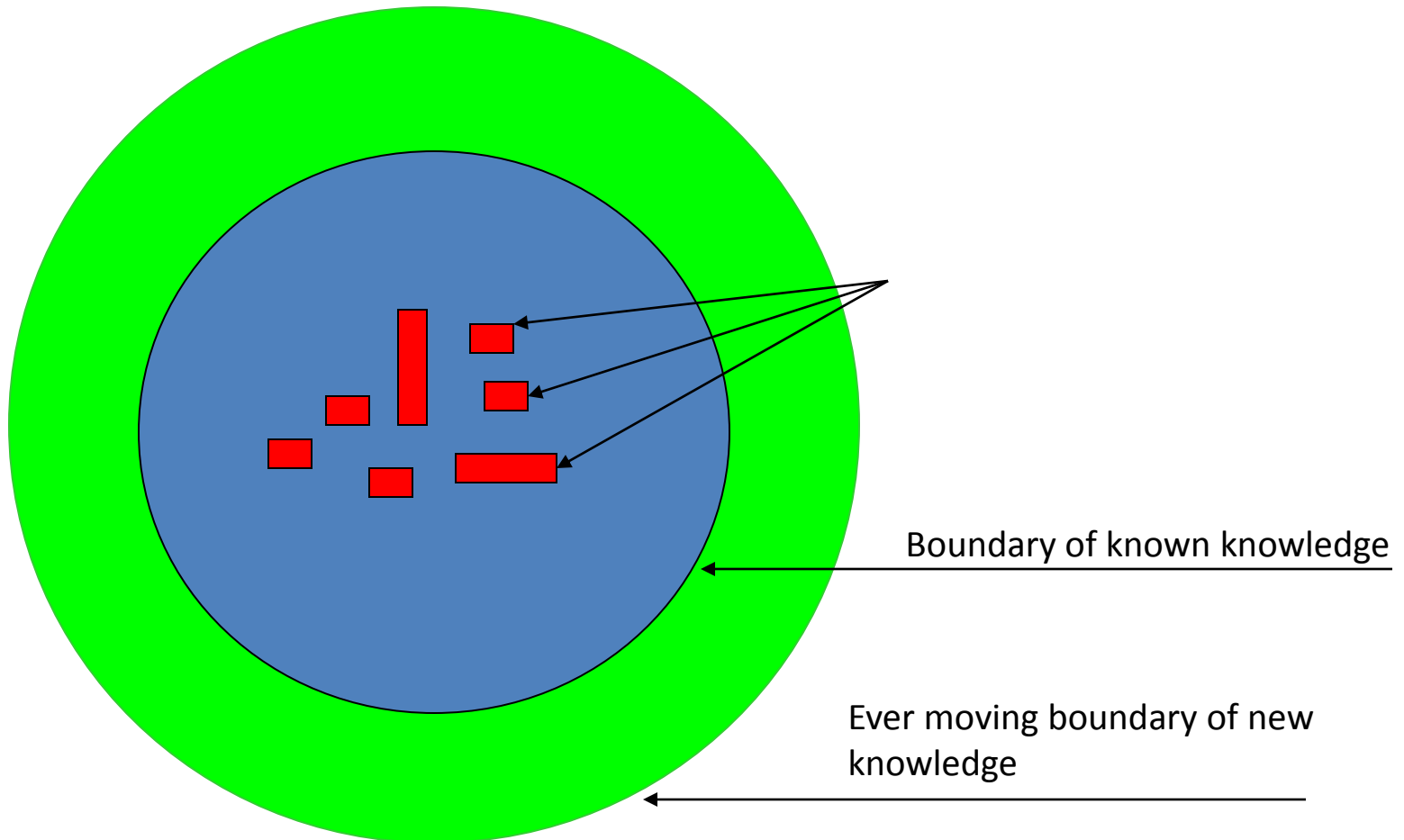
Elements of education



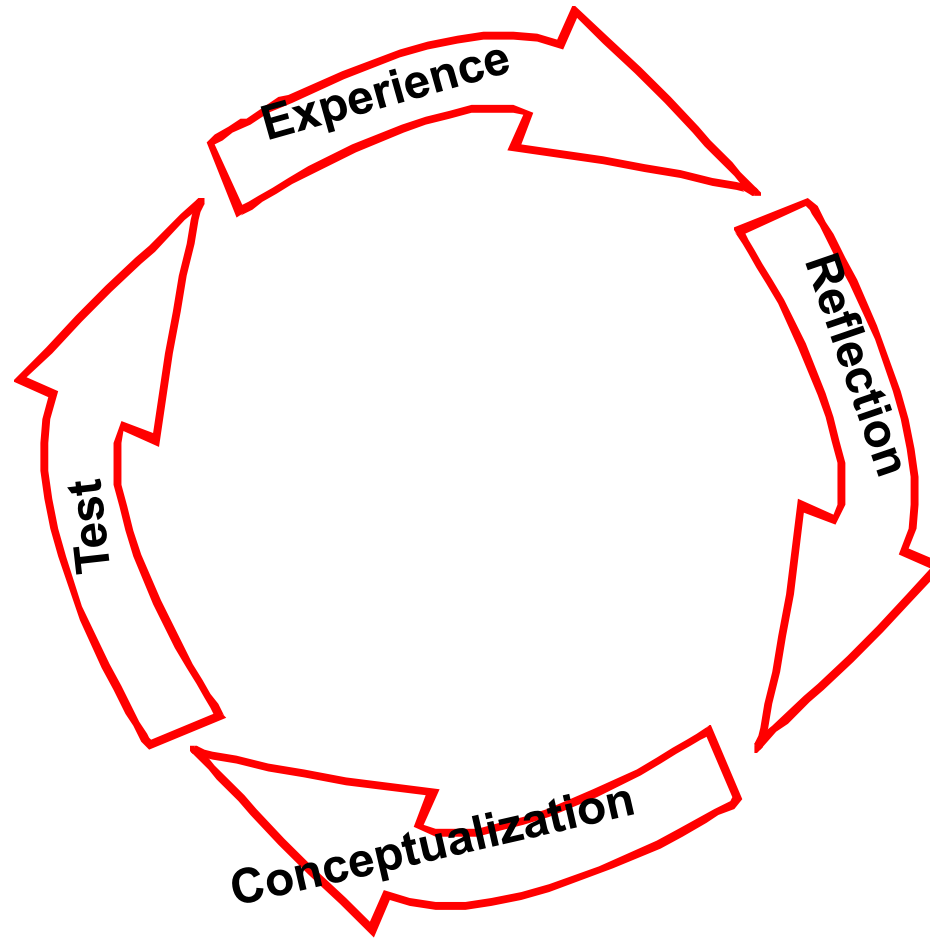
Why POPBL?



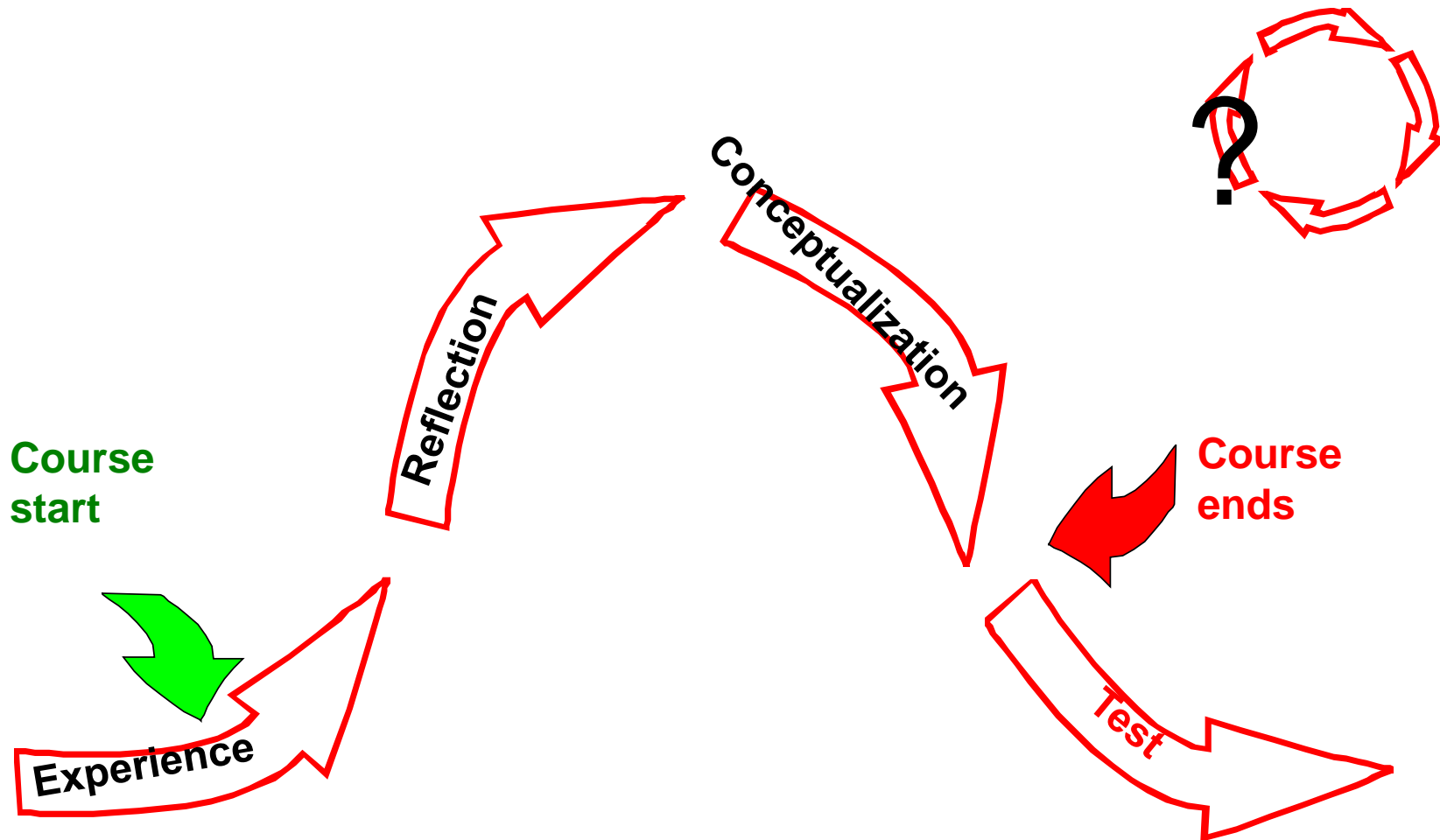
Why POPBL?



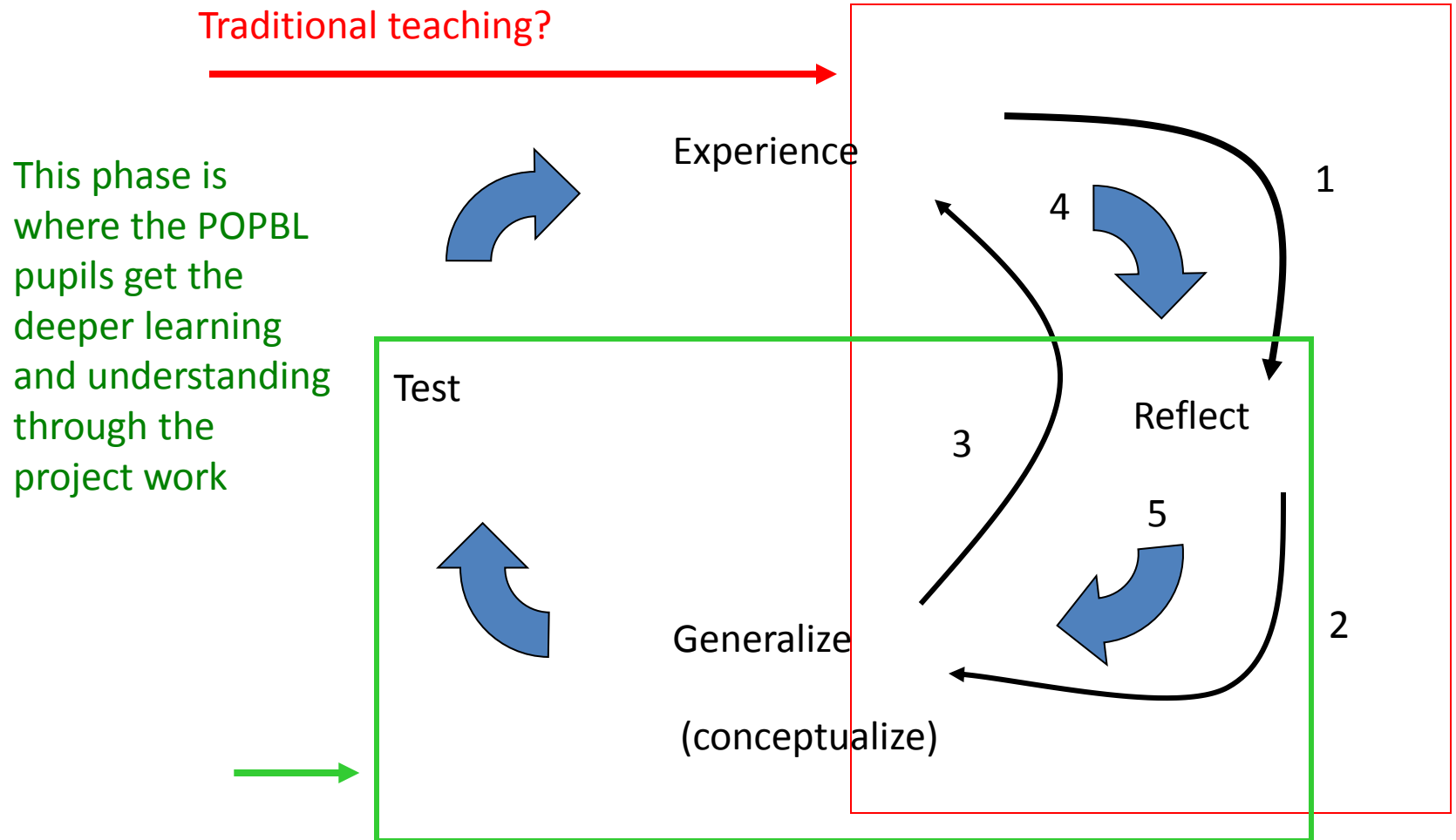
What is POPBL?

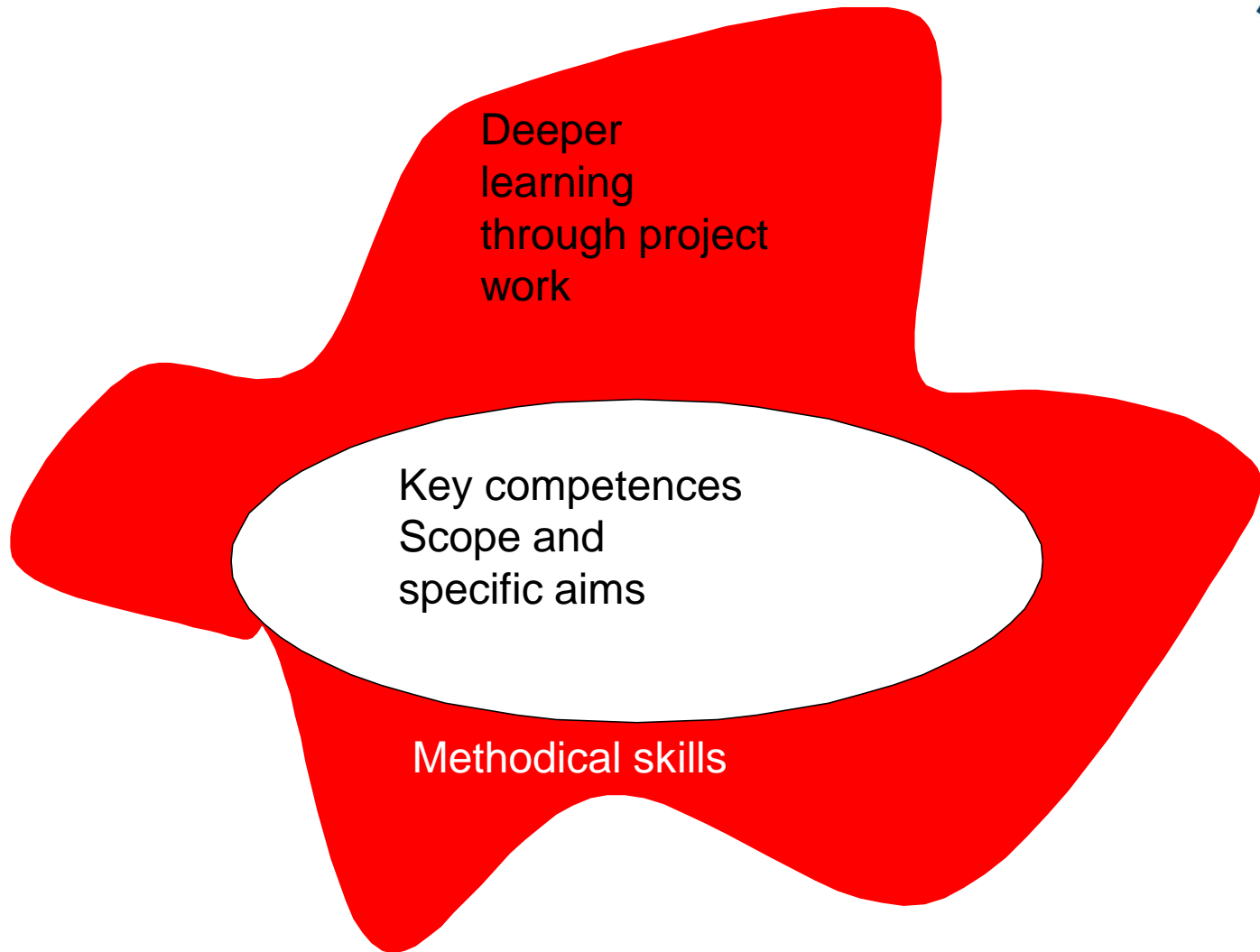


Kolb's learning cycle

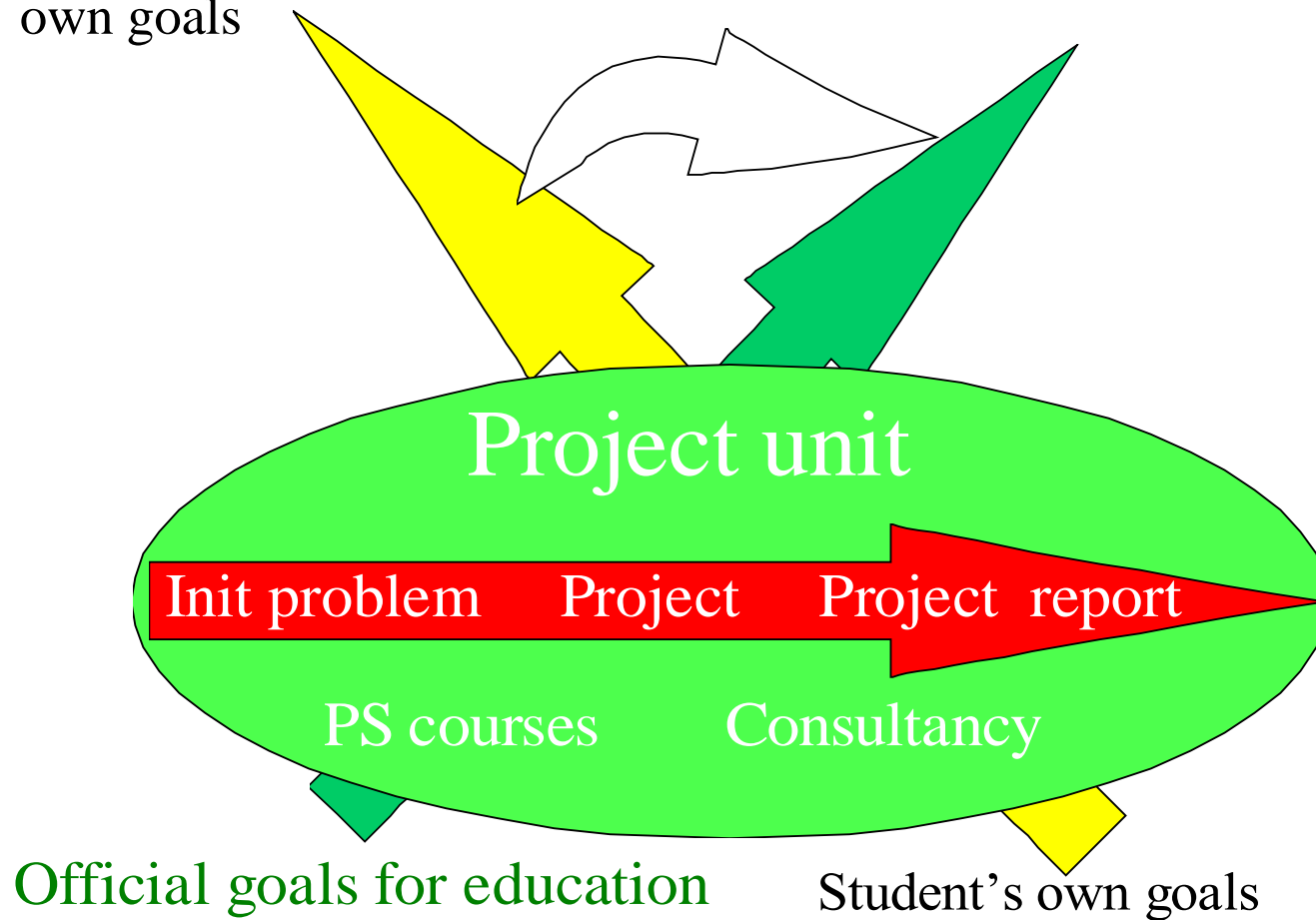


How do we learn ?





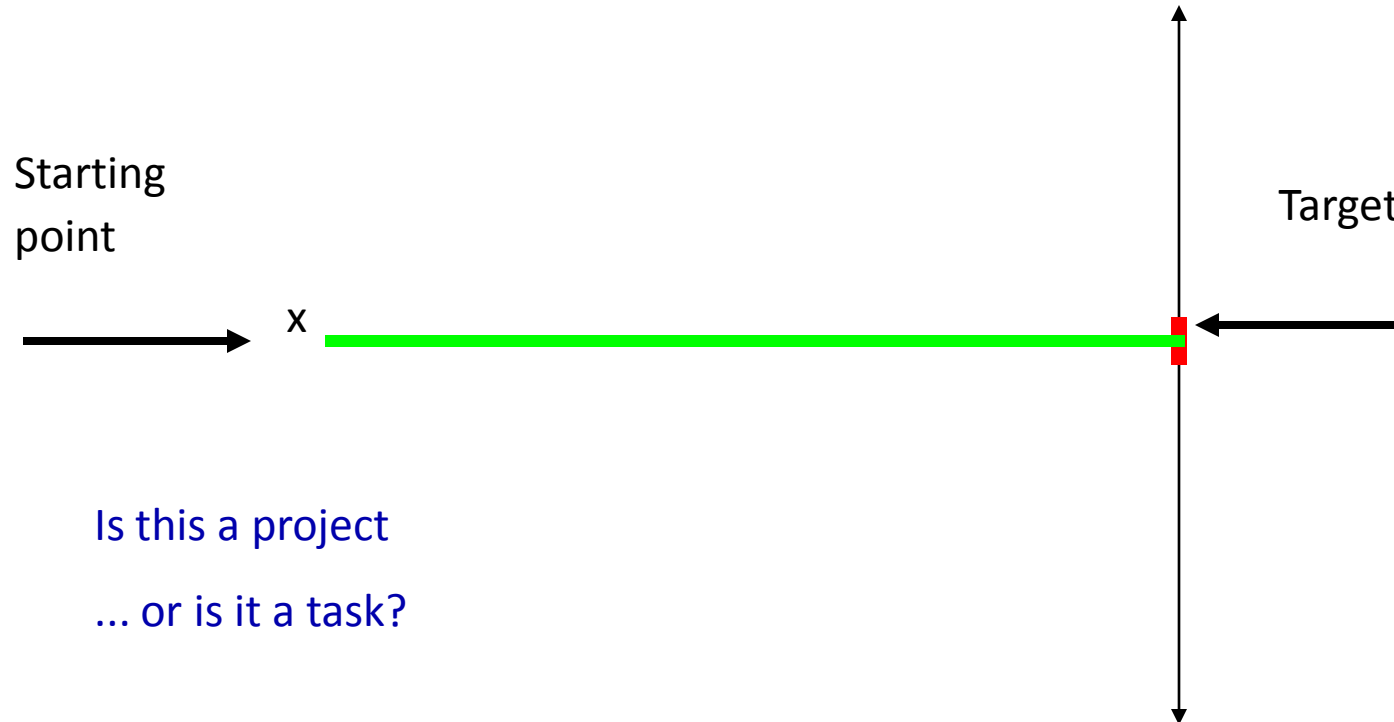
Fullfilment of student's
own goals



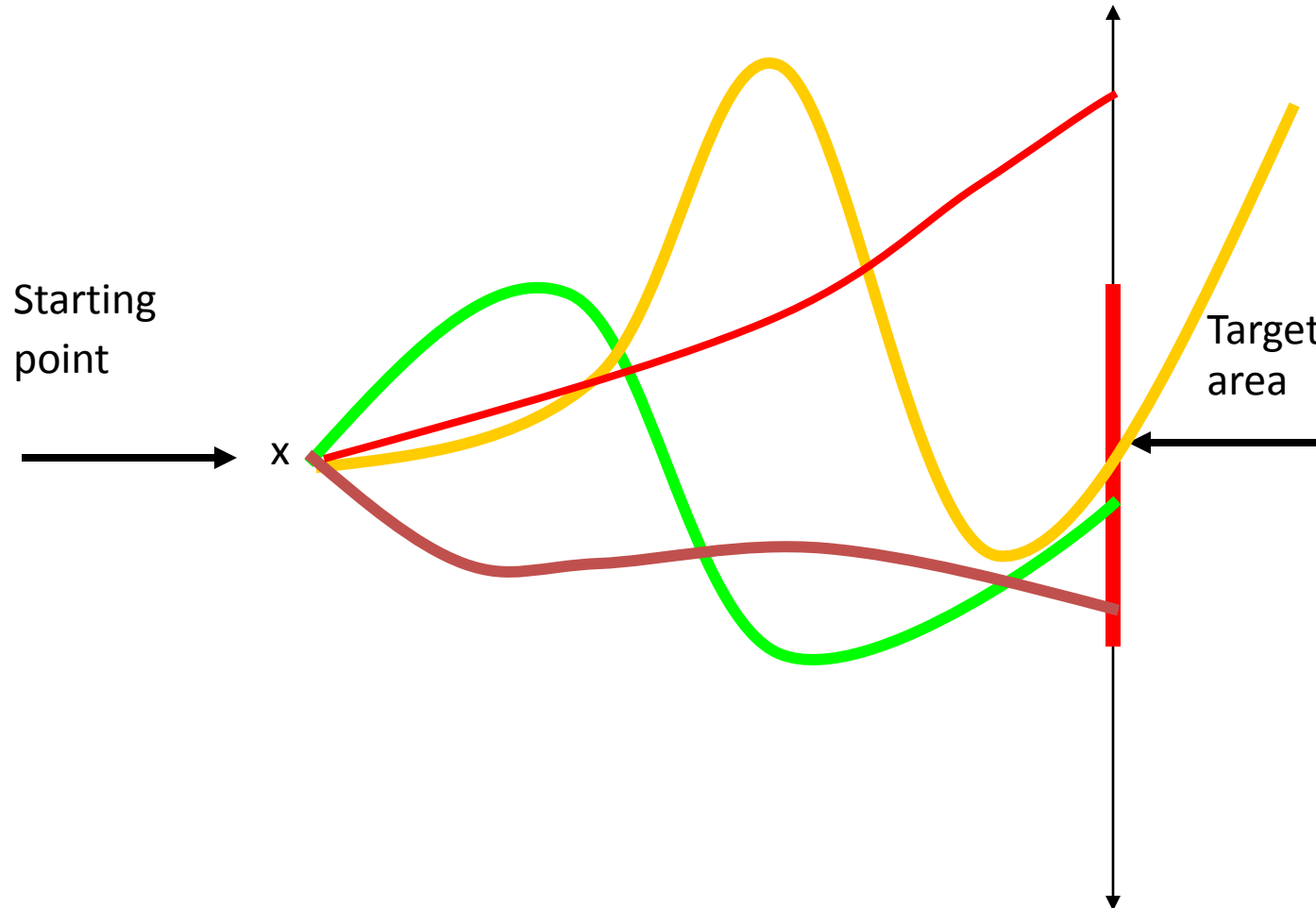
Supervisors role

- Design the project
- Facilitate the team works and learning process
- Conduct the evaluation

Design of a project



Design of a project



POPBL as learning method

The semesters are built up of

- The project
- Project unit courses
- Study unit courses

Types of projects

3 Types of projects

- **Projects in one discipline/course**
- **Interdisciplinary projects**
- **Cross disciplinary projects**

POPBL as learning method

- The project work is carried out in groups of 2 – 6 students
- The students create the groups themselves
- There is normally a catalogue with suggestions of project for each semester
- The project is evaluated in an oral examination
- The project counts app. 50% of the study
- There is one project each semester

The students and POPBL



There is no doubt about that our students like the POPBL way of studying

They learn how to study and how to pick up new knowledge also about materials

They appreciate to cooperate with an industrial partner

They learn to be responsible for their own learning

They regard the supervisor as a coworker more than a teacher

Advantages in POPBL

- Pupils learn to cooperate
- Teachers need to cooperate if the projects shall run over different subjects and over a period
- Pupils learn to find information
- Pupils own the project
- They can use their creativity in science
- They are motivated, because it is their project
- They remember the knowledge they have obtained, because they have learned it in an active way

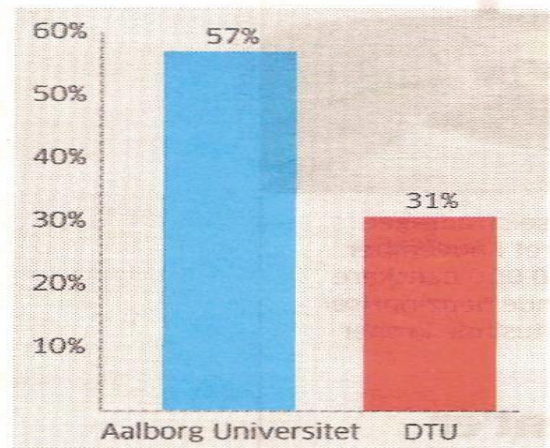
The surroundings and POPBI



For explaining that, I will just show the result of a present made investigation about the best technical universities in Denmark

AALBORG FORAN DTU

Disse uddannelsesinstitutioner er ifølge virksomhedspanelet mest nytænkende, i forhold til at tilrette ingeniøruddannelserne efter erhvervslivets behov



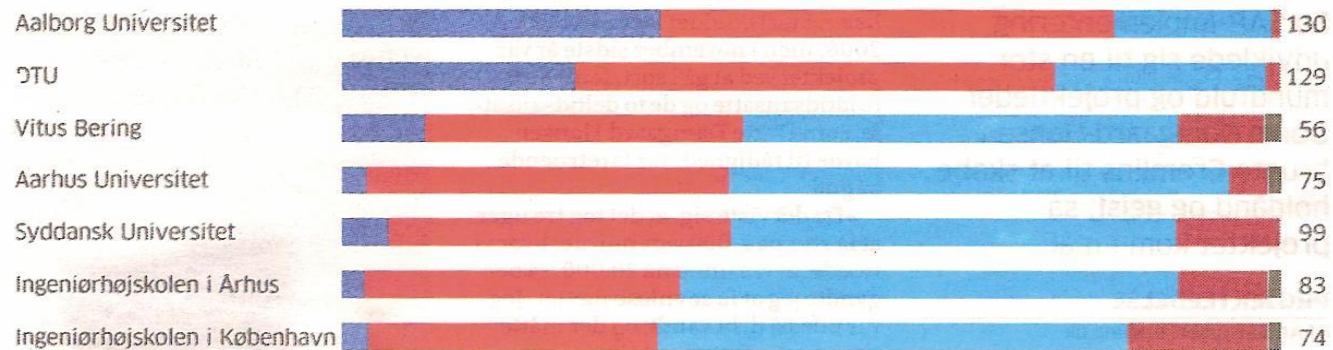
Kilde: Ingeniørens og IDAs konjunkturundersøgelse

VIRKSOMHEDER GIVER AALBORG UNIVERSITET TOPKARAKTER

Hvordan vil du alt i alt bedømme de forskellige uddannelsesinstitutioner på en skala fra 1-5, hvor 1 er dårligst og 5 er bedst?

Bedst < 5 4 3 2 1 >Dårligst

Antal svar
excl. 'ved ikke'



Kilde: Ingeniørens og IDAs konjunkturundersøgelse, maj 2008

Thank you for your attention