

<http://www.halvorsen.blog>

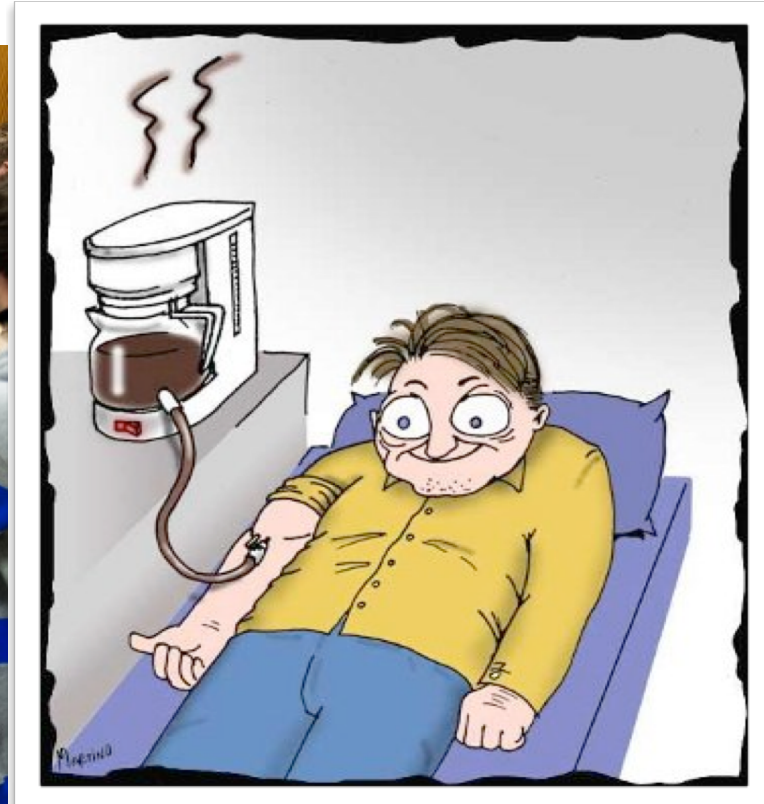


# Teaching Principles

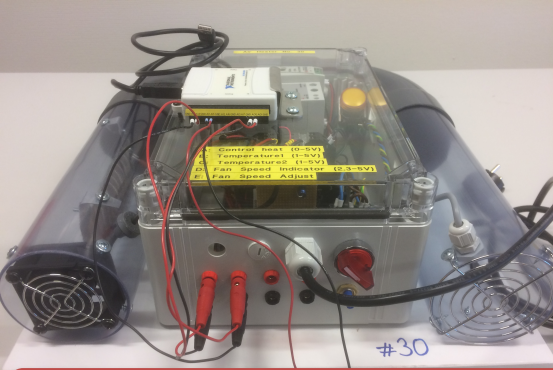
Hans-Petter Halvorsen

# Do you learn like this?

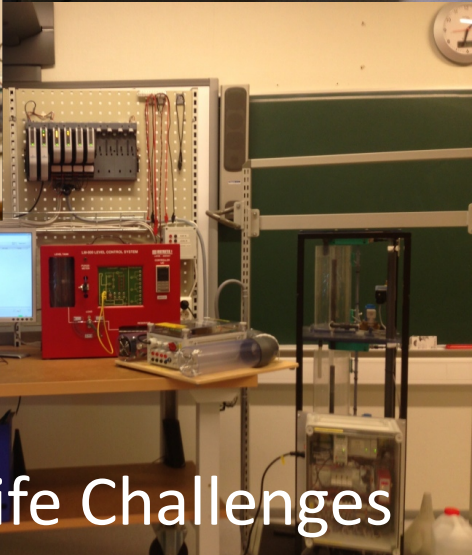
Traditional Lectures:



Passive Teaching with little Learning outcome



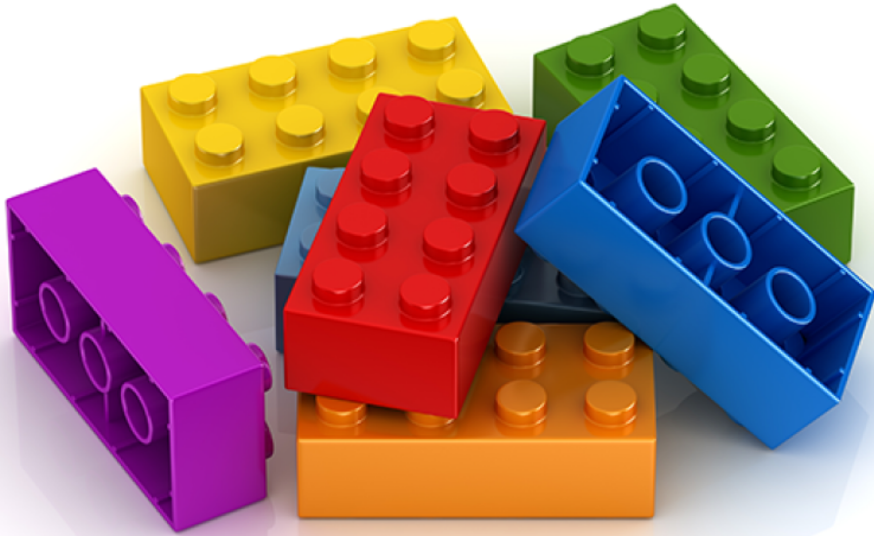
We will Create, Build, Implement, Test and Explore – and Collaborate!



In this course we will work with Practical Real-life Challenges



# Building Systems

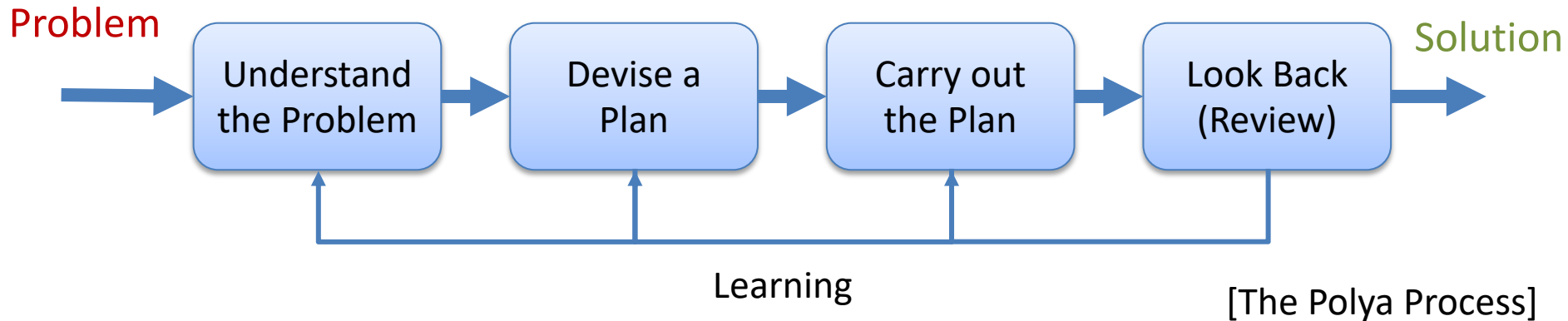


This course will be like playing with Lego. The instructions are only “half-finished”, the rest is up to you. Explore and be Creative!



# Problem-based Learning (PBL)

This course will be based on Problem-based Learning principles.  
The focus is Practical Implementation.



The PBL students score higher than the students in traditional courses because of their learning competencies, problem solving, self-assessment techniques, data gathering, behavioral science, etc.

# Teaching Outcome

Lectures – 5%

Reading – 10%

Hear and See – 20%

Demonstrations – 30%

Discuss in Groups – 50%

**Practical Exercises – 75%**

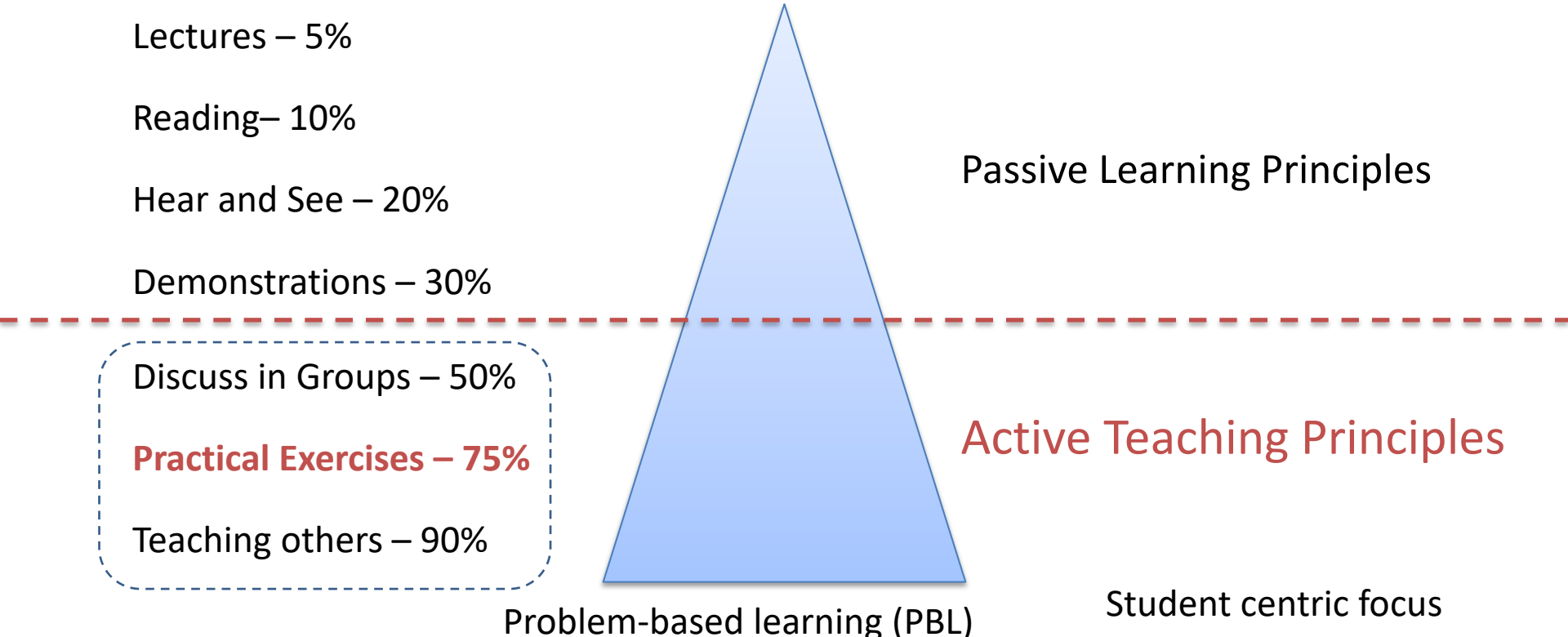
Teaching others – 90%

Passive Learning Principles

Active Teaching Principles

Problem-based learning (PBL)

Student centric focus



# Teaching Principles

## **1. Problem Based Learning (PBL):**

- Less Theory
- No Lectures in class
- You should get experience with practical problem solving

## **2. Flipped Classroom:**

- No Lectures in class
- Individual help and adjustments
- Collaborate with others, etc. in class
- Go through Tutorials and Videos in advance



# Are you a Chef?

- Anyone can follow a recipe (the assignments with examples), but not everyone becomes a Chef.
- What is needed to make an extraordinary good meal?
- A Chef adds spices and secret ingredients - and presents it in a delicate way
- A Chef works hard and targeted. He experiments with new concepts. He “Think outside the Box”.
- Try to figure out how you become a Chef!

*“Make it as simple as possible, but not simpler.”*

Albert Einstein

*“Programming is both Science and Art”*

*“Programming is Engineering”*

# Hans-Petter Halvorsen

University of South-Eastern Norway

[www.usn.no](http://www.usn.no)

E-mail: [hans.p.halvorsen@usn.no](mailto:hans.p.halvorsen@usn.no)

Web: <https://www.halvorsen.blog>

