Jens Kaasbøll, Department of Informatics, University of Oslo

Overview

- Competence
  - The status of our abilities
- Learning
  - The change of competence
- Teaching and support
  - Others' influence on learning

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Learning

- Learning is based on existing competence
  - We construct our own skills and understanding
    - We don't copy the teacher's competence
- We learn in small steps
  - Teachers need to know the competence of learners
- We learn through interactions with
  - Other students
  - Teachers
  - Computers
  - Books
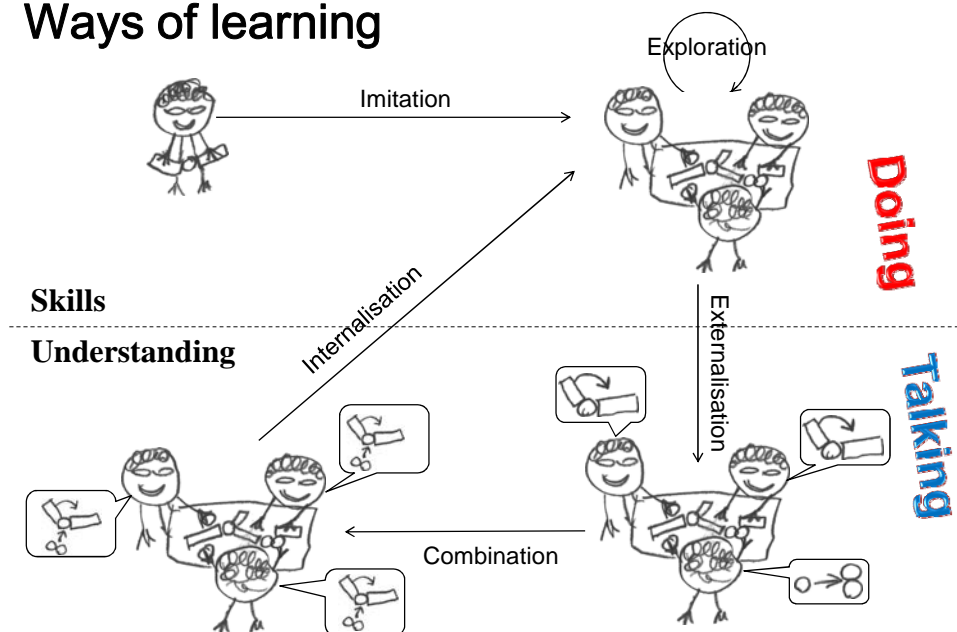 - …

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IT user competence

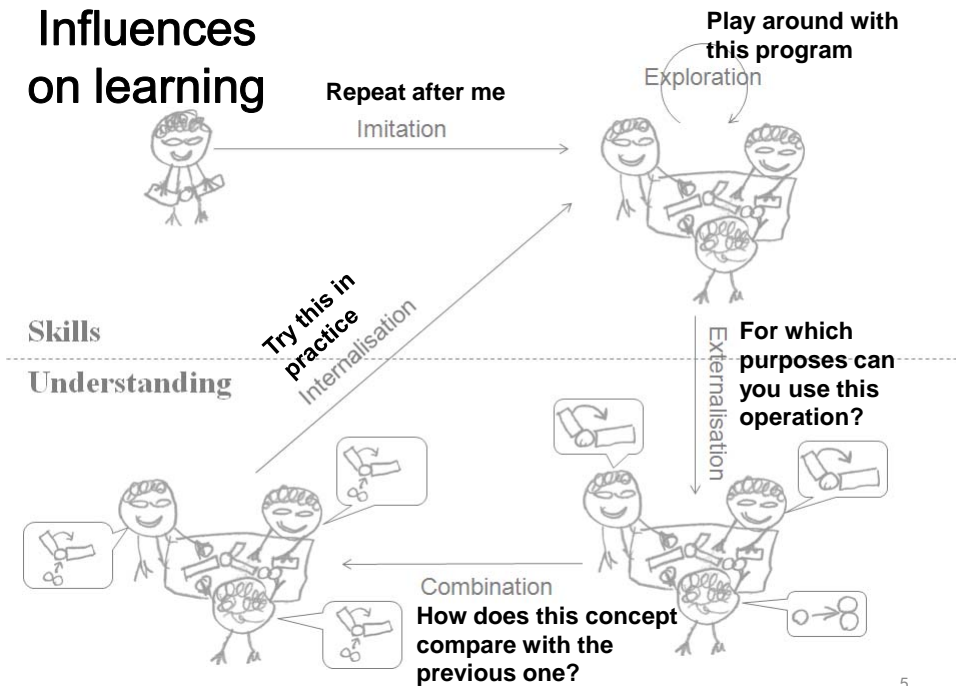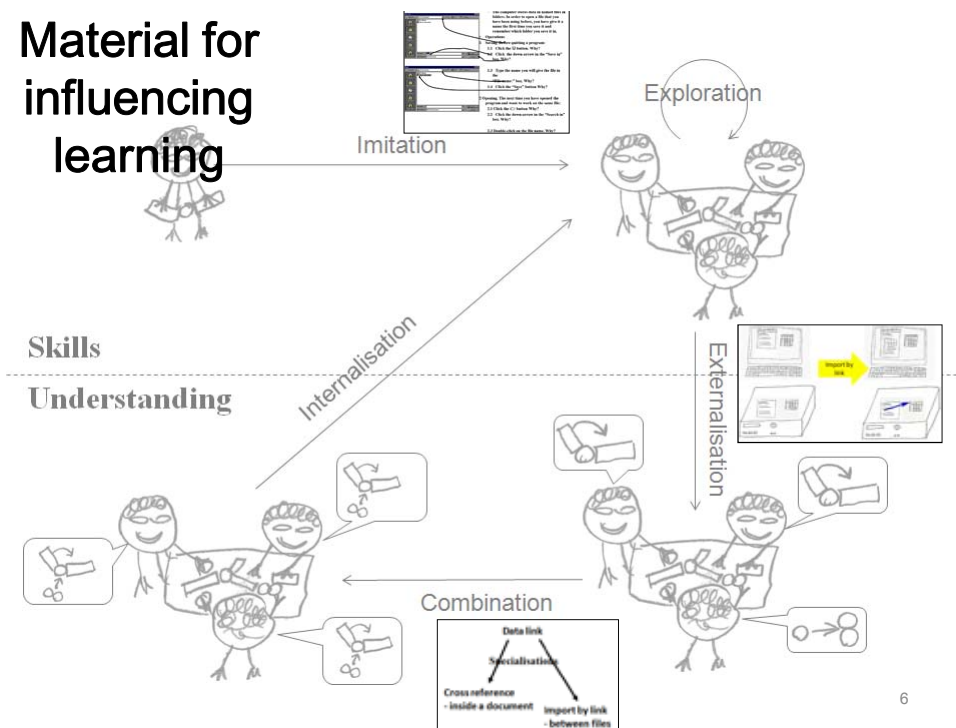|	Information	IT	Tasks
Skills **for doing the job**	Interpreting data	Using an application	Know how to use IT for supporting your task
Understanding **for learning**	Negotiating a representation of a phenomenon	Concepts, principles, hidden structures	Motivation. Acknowledge usefulness. See possibilities.

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Ways of learning

Exploration

Imitation

Doing

Internalisation

Externalisation

Talking

Skills

Understanding

Combination

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Influences on learning

Play around with this program

Exploration

Repeat after me

Imitation

Skills

Try this in practice

Internalisation

Understanding

Externalisation

For which purposes can you use this operation?

Combination

How does this concept compare with the previous one?

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Material for influencing learning
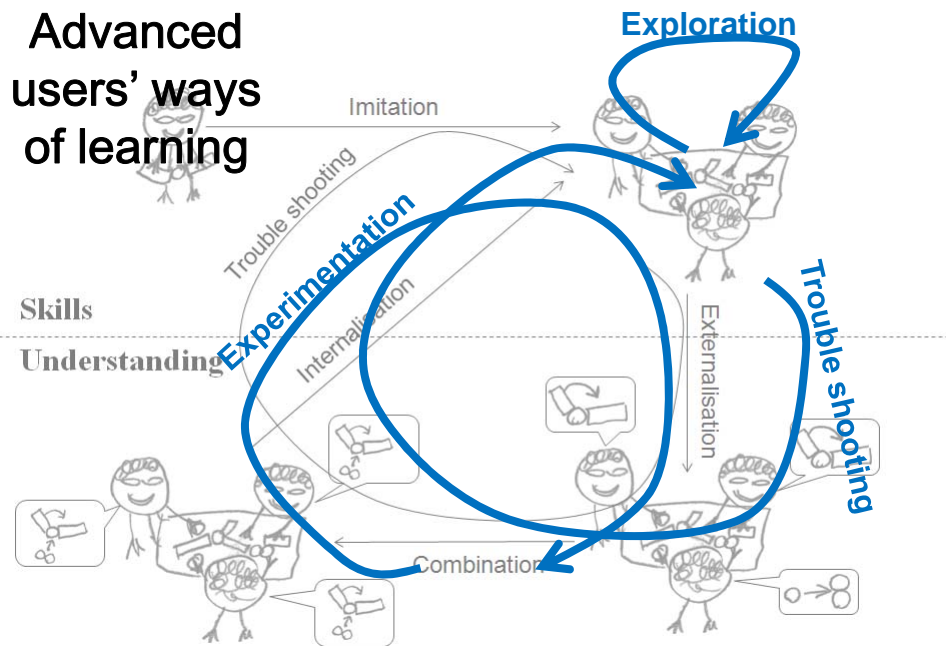
Exploration

Imitation

Skills

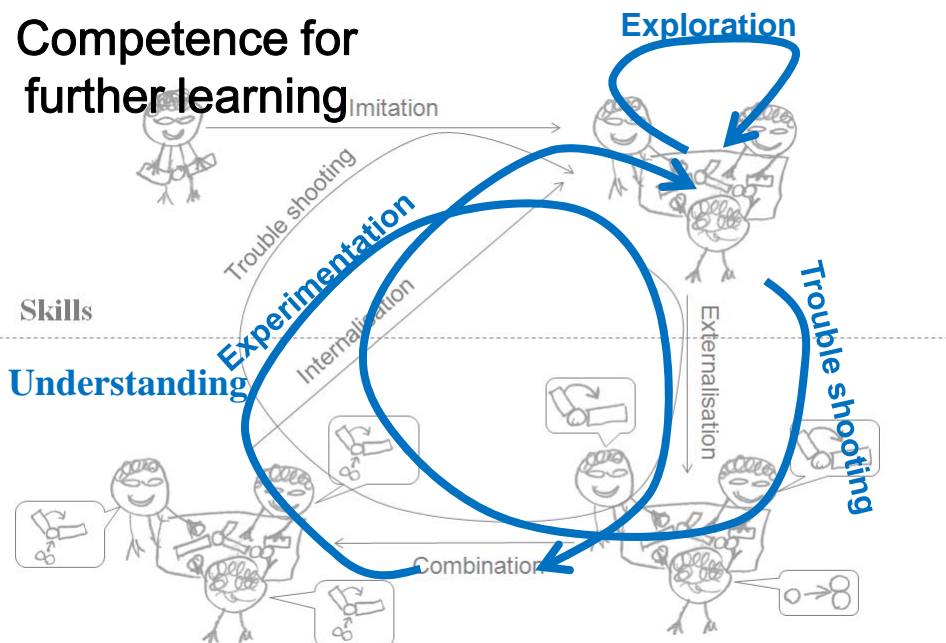Internalisation

Understanding

Externalisation

Combination

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Assessing IT user competence

	Information	IT	Tasks
Skills for doing the job	Assess practice: Request doing		
Understanding for learning	Assess theory: Request explaining Multiple choice or open		

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Designing teaching

	Information	IT	Tasks
Skills for doing the job	Interpreting data	Using an application **S**	Know how to use IT for supporting your task
Understanding for learning	Negotiating a representation of a phenomenon	Concepts, principles, hidden structures **C**	Motivation. Acknowledge usefulness. See possibilities **U**

Introduction

Internalisation

Practical

Imitation

Advanced ways

Summary

Externalisation

Advanced users' ways of learning
- Exploration
- Experimentation
- Trouble shooting

Assessing competence

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