Maastricht University Leading in Learning!

Time to reflect on the adaptation of the instructional design for online education: the 4C/ID approach

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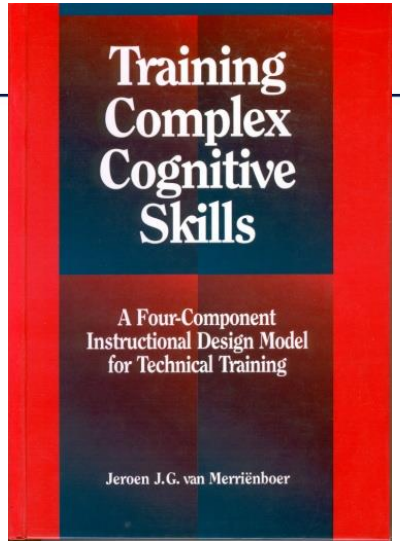
Welcome!

- **Rules**
  - Mute your microphone!
  - Use the chat for asking questions
  - Participate in polls and assignments

- **Today's schedule**
  - Opening poll
  - What is 4C/ID?
  - Example Course
  - Learning task 1
  - Learning task 2 (break out groups)
  - Plenary report
  - Q&A
  - Closing poll

Opening Poll Questions

Four-Component Instructional Design (4C/ID)



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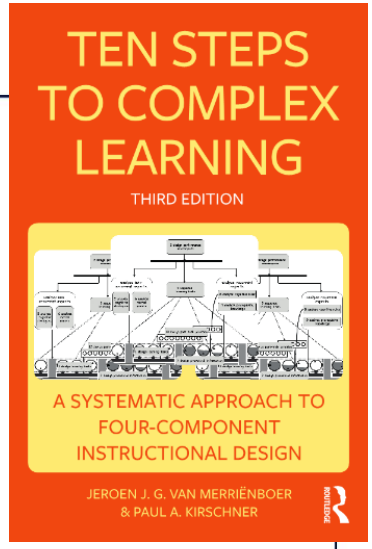

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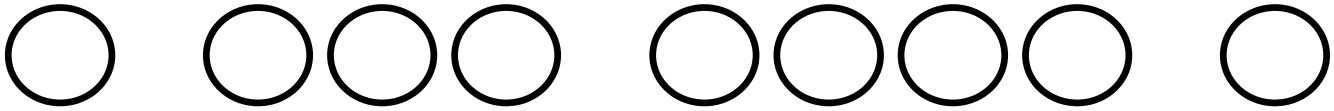
1. Learning tasks
   - Backbone of educational program
2. Supportive information
3. Procedural information
4. Part-task practice

1 Learning tasks

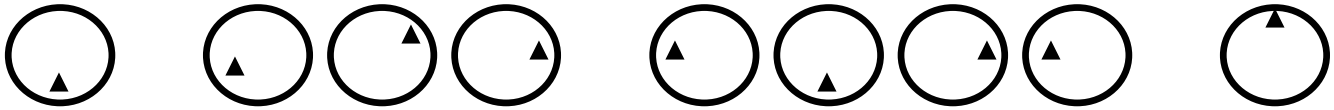


Problems, projects, tasks, assignments, cases etc.

- *Based* on authentic, real-life tasks
- Integrative; make appeal on knowledge, skills & attitudes

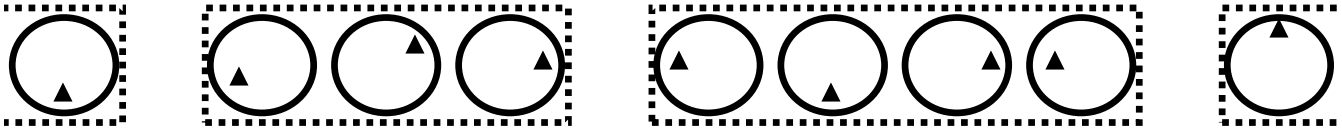
Offline	Online
Role play, project groups, PBL groups, professional tasks at workplace, scenarios in hifi simulation lab	Online project groups, online PBL groups, scenarios in computer-based simulation/gaming

1 Learning tasks - *Variation*

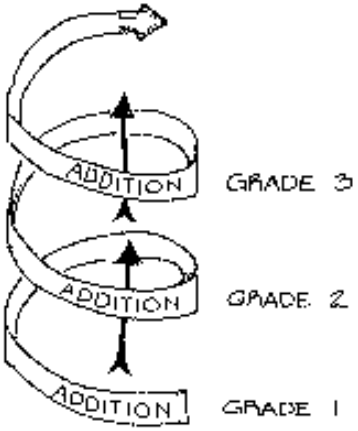


- Variation enables *transfer* of learning
- Different on all dimensions that also differ in the real world

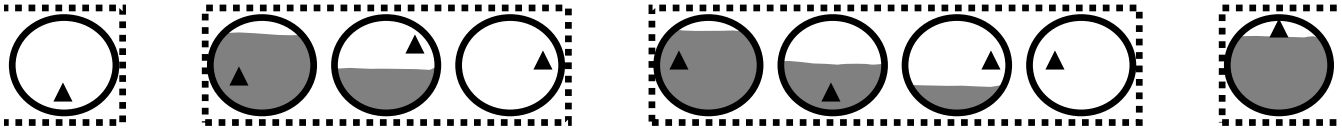
1 Learning tasks – *Levels of Complexity*



- Sequence from simple to complex
- Authentic from the beginning
- Variation at each level of complexity

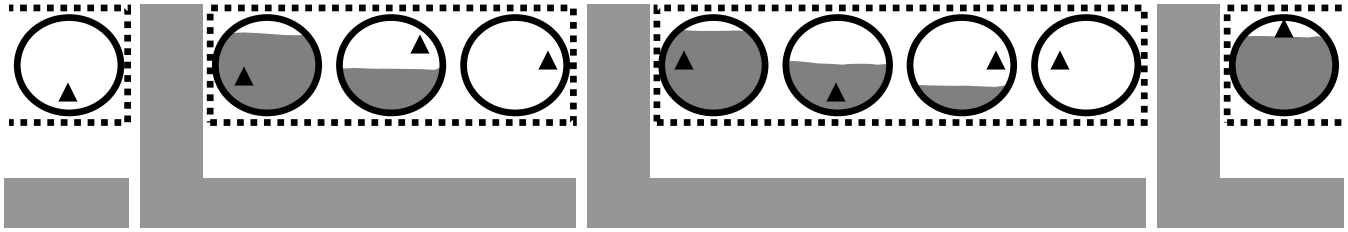


1 Learning tasks – *Guidance*



- "Scaffolding" on each level of complexity
- E.g., through first giving examples and/or worksheets
- Zone of proximal development

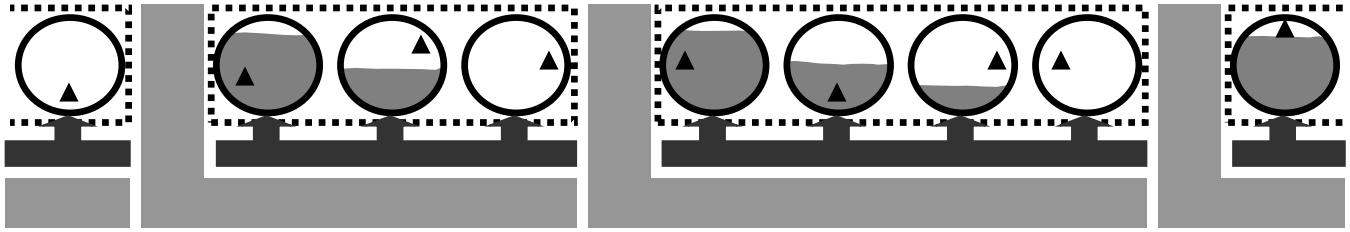
2 Supportive information



- Problem solving and reasoning
  - Domain models
  - Systematic approaches to problem solving
  - Cognitive feedback

Offline	Online
Lectures, books, encyclopedia, realia (e.g., a skeleton), physical models	Video clips, hypermedia, social media, computer animation, micro-worlds

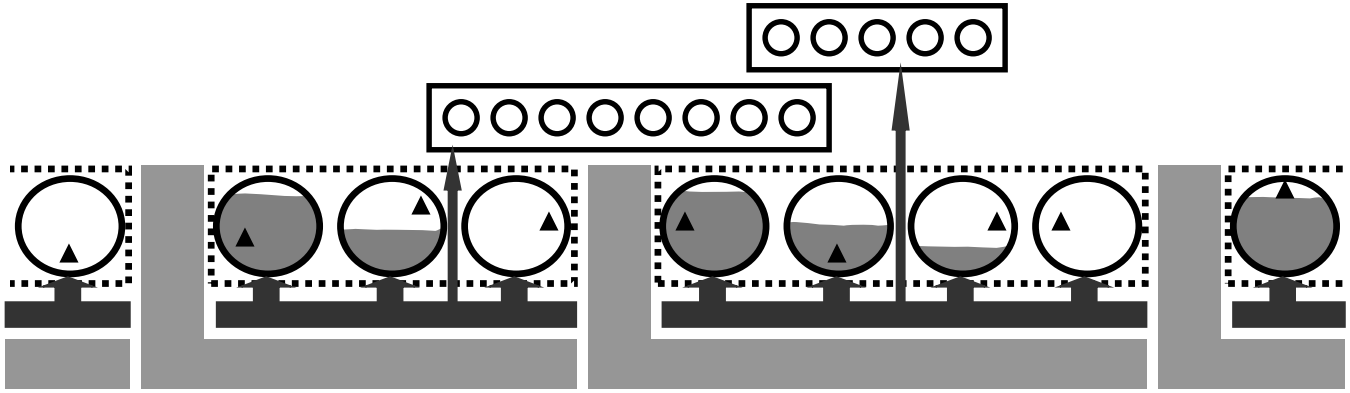
3 Procedural Information



- Routine-aspects
- 'How-to' information, just-in-time
- Corrective feedback

Offline	Online
Instructor (ALOYS), user manuals, checklists, job aids, quick reference guides	Online instructor, online job aids and help systems, mobile technologies, wizards, AR

4 Part-task practice



- Cognitive context
- Repetitive practice

Offline	Online
Paper and pencil, skills laboratory, practicals, real task environment	Computer-based training, games for basic skills training, online part-task trainers

Integrated Education

- Example Course
- Assignment 1
- Assignment 2
  - break-out groups
- Plenary reporting

QUESTIONS
ANSWERS

Closing Poll Questions

Thank you for your attention!

www.4cid.org