



Instructional Design – The systematic design and development of opportunities to learn

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<http://competen-sea.eu/workshop-in-indonesia-february-2018/>




Co-funded by the
Erasmus+ Programme
of the European Union

[1]

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What is Instructional Design (ID)?

- Instructional Design: Theory and Practice to arrange efficient learning environments based on **evidence based instructional psychology**
- ID model is a framework model → **Decision Oriented ID (DO ID)**, not in concurrency with proven ID models
- DO ID → defines which **(fields of) decisions** have to be considered in any process of Instructional design and provides information on each of those fields



[2]

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Outcome of Using the DO ID Framework Model?

- **Not recipes (definitively!)**
- **Instructional Design Patterns ...**
... contain those features that are indispensable for the success of the instructional process

Example:

To teach a (concrete) concept, 6 steps are indispensable

1. Activation of the pre-knowledge
2. Introduction of the new meaning with **examples**
3. Development of the characteristics
4. Application
5. Teach Transfer explicitly

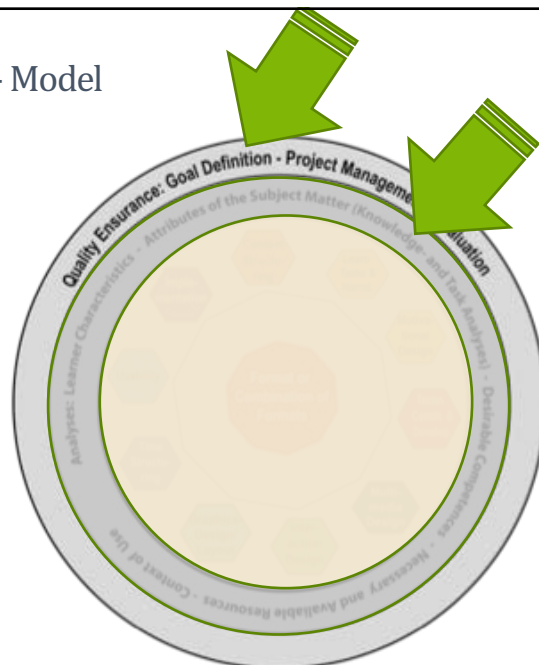
Oser & Baeriswyl (2001):

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DO ID - Model



[5]



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Instructional Design (ID) for the Design and Development of MOOCs:

- First field for exercises
- Knowledge and Task Analyses
 1. A useful tool for knowledge analysis: **coggle.it**
 2. Analyze (a part of) the content you will convey in your practice

[6]



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DO ID - Model



[7]



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Content Structuring



8

Learning Tasks and Narration



9

Motivation Design



[10]

Instructional Design (ID) for the Design and Development of MOOCs: Motivational Design

- Second field for exercises
- Opportunities for practical Motivation Design
 - A guideline on the website to be used for your trials to find appropriate ways to motivate your audience following J. Keller's ARCS model

[11]

Technical Conditions and Development



[12]

Multimedia Design



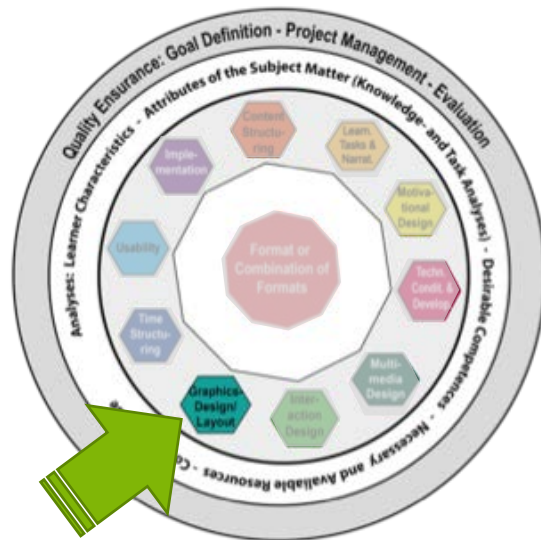
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Interaction Design



[14]

Graphics Design, Layout



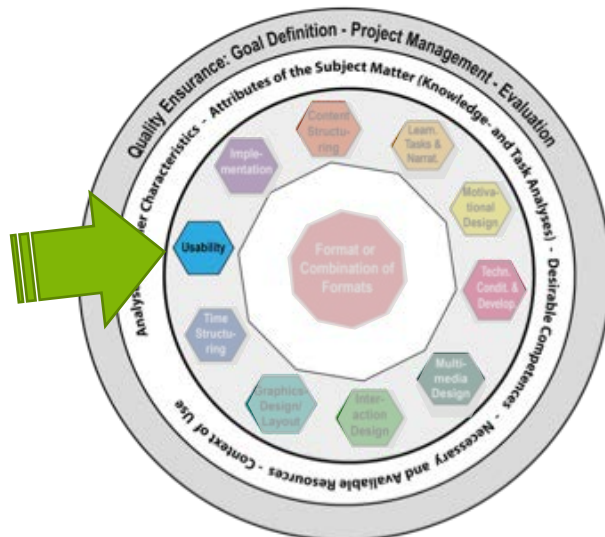
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Economy of Time, Time Structuring



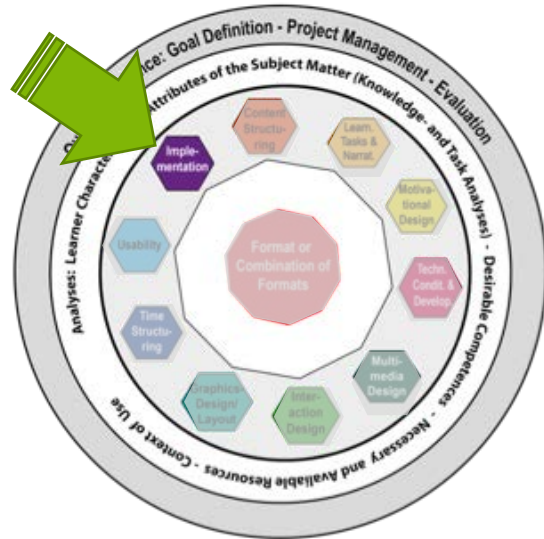
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Usability



[17]

Implementation



[18]

Evaluation



[20]

Evaluation

- Evaluation → Integrated into the process of quality assurance, part of the project management
 - Even the first sketches of the instructional design should be evaluated, e.g. by other members of the team, by the contractee or the employer, persons from the target group
- Criteria of the evaluation should be derived from the evidence based recommendations, which guided the design process
- To evaluate an eLearning project do not only assess data from the participants (learners), but also from experts (ID, SMEs, Software engineering experts) and stakeholders
- Assess the learning outcomes, the costs, the time of development and the learners' attitudes (joy of learning?)

[21]



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Creativity



[22]



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Self-Regulated Learning

- MOOCs are mostly received individually at a specific time and in a specific context and chosen by learners who regulate their learning by themselves.
- Self-regulation is well studied and we know about factors making it successful or hinder it

[24]



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A Final statement

“Since evidence suggests that the computer is not inherently superior to other instructional media, **effective computer-based instruction must be based on rational learning theories**”

Hannafin & Rieber, 1989

The challenge of the use of emergent technologies in e-learning is not the technology – it’s the deliberate application of evidence based instructional design.

[26]



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Thank you for your attention.

Questions or comments now
or later @

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[27]



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