Competence Development: From ‘mind the gap’ to ‘mind the step’

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Agenda: Competence Development
From mind the gap to mind the step

- **starting point**: competence and competence models
- **problems**: Logic of competence models
  From mind the gap logic to mind the step logic
- **prerequisites**: competence development in essential relations
- **to dos**: task design / assignment design
structural approach towards competence

1. Requirements (complexity, structure, autonomy ...)
2. Actions
3. Dispositions (knowledge, skills, attitudes)

person

context

Competence models

Different Logics

competence development

To dos
**competence models**

**structural**
1. perspectives: occupational, social, personal competence
2. analytical dimensions: domain specific, disciplinary bound
3. components: knowledge, skills, attitudes
4. processes: single steps of a process chain

**levels**
1. cognitive procedures: e.g. reproduction – reorganisation – development
2. Width of knowledge
3. Depth of knowledge
4. Certainty of knowledge
5. Degree of autonomy
6. Degree of responsibility

**development**
very little information
hints towards single models (expertise development experienced based learning e.g. Kolb learning cycle,..)
In the domain of foreign trade

In the domain of academic writing skills
levels not steps  (Example from Dreyfus / Dreyfus 1980)

- novice
  - Analytical differentiation in partial problems
  - Very few general principles

- experienced
  - Influenced by single context factors
  - More differentiated
  - use of theory /models / concepts

- competent
  - Strategy development
  - Holistic approach
  - Consequences are considered
  - reflection on action
  - increased flexibility

- expert
  - Direct use of relevant concepts
  - High transferability
  - Holistic comparison between contexts
  - reflection on and in action

Competence models | Different Logics | competence development | To dos
competence models up until now: logic of

target – performance - comparison
<table>
<thead>
<tr>
<th>Competence models</th>
<th>Different Logics</th>
<th>competence development</th>
<th>To dos</th>
</tr>
</thead>
</table>

### Competence models

- Different Logics
- Competence development
- To dos
### Levels not Development Steps

<table>
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<tr>
<th>Level</th>
<th>Characteristic Features</th>
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<td>Novice</td>
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**What is the difference that makes a difference?**
- Different schema?
- Different scripts?
- Different strategies?
- Different regulation?
- Different reflections?
- ...
competence models for competence development: logic of

In search of:
the underlying problem patterns and sequences

What is the problem?
How to initiate the change?

- linear: to handle more complexity
- changes in concepts: e.g. from disciplinary to interdisciplinary
- changes in modalities: ‘to act with directions’ -> to self regulated action

The table represents intended and actualized levels with can-do-descriptors.
# Phases of Competence Development

(Gordon Training International (o.J.))

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<th>Competence</th>
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<tr>
<td><strong>No awareness</strong></td>
<td><strong>Intentional application,</strong></td>
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<tr>
<td><strong>No awareness in the competence area</strong></td>
<td><strong>Experiential mode of high awareness on action and reflection</strong></td>
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<tr>
<td>No identification of individual weaknesses, miss-conceptions, gaps</td>
<td>Use of support and guidance</td>
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<tr>
<td>No feeling of relevance of development need</td>
<td>Self regulated action and reflection</td>
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<tr>
<td>• Increasing awareness due to experienced problems, failures, gaps</td>
<td>• Repeated circles / iterations</td>
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<td>• Idea of possible competence development</td>
<td>• Building a routine</td>
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<tr>
<td>• Internalization</td>
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</table>
competence development

- competence development need
- competence development context
- didactical intervention
- effects on competence structure

action & reflection

- competence
- experience
- generalization

context

- application
- t1
- t2

Competence models | Different Logics | competence development | To dos
action regulation & knowledge application
(Shavelson et al. 2003:8, Carle 2000: 25)

- theory – models, concepts, specifications
- schemes and scripts, selections and modifications
- conditional and strategic elaborations
- Selections and modifications
- (meta-cognitive regulation

- actions

- Competence models
- Different Logics
- competence development
- To dos
task design for competence development

- problem orientation
- contextualized
- Goal oriented
- actions and reflections
- autonomy

competence development context

- competence need
- Tasks design / assignment design
- effects on competence structure

didactical intervention

- accessible & relevant
- scaffolding
- demand driven
- supports application and generalization processes

Competence models | Different Logics | competence development | To dos
1. Experience of problems in relation to complexity of task
2. Freedom to action in relation to level of autonomy
3. Focal variability in order to cope a basic structure with flexible strategies
4. Integrally action: need for action and reflection
5. Social support and social relatedness
6. Individualization: Possibility to shape the task in its own way

High impact learning and teaching practices:
(s.f. Evans / Mujis / Tomlinson for an literature review 2015)
Thank you for your competence application

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