Situation-based didactics
Agenda

- Premises and assumptions
- Two crucial concepts
- Situation-based didactics (SiD) at a glance
- Macro- and micro-phases of SiD
- Practical simulation
- Implication for teachers’ training
- Conclusion and wrap-up
Premises and assumptions I

- In the 90s: shift from knowledge/subject-based education to competence-based paradigm
- The competence paradigm as the answer to high-level working requirements to handle with complex and non routinary tasks and with a demanding globalized society (Biemans et al. 2009; Boldrini, 2010; Ghisla, Bausch, Boldrini, 2008; Boldrini, Ghisla, Bausch, 2014).
- Competence-based curricula and profiles in VPET in Switzerland (Law on VPET, 2002)
### Premises and assumptions I

<table>
<thead>
<tr>
<th>Handlungskompetenzbereiche</th>
<th>Handlungskompetenzen</th>
</tr>
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<tbody>
<tr>
<td>a  Handlungskompetenzbereich</td>
<td>a1: Handlungskompetenz</td>
</tr>
<tr>
<td>b  Handlungskompetenzbereich</td>
<td>b1: Handlungskompetenz</td>
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<tr>
<td>c  Handlungskompetenzbereich</td>
<td>c1: Handlungskompetenz</td>
</tr>
<tr>
<td>e  Handlungskompetenzbereich</td>
<td>e1: Handlungskompetenz</td>
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## Premises and assumptions II

<table>
<thead>
<tr>
<th>VET school</th>
<th>Intercompany courses</th>
<th>workplace</th>
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</thead>
<tbody>
<tr>
<td>Main instructional strategy</td>
<td>Acquisition model</td>
<td>Integrative model</td>
</tr>
<tr>
<td>Epistemological function</td>
<td>Explicit knowledge (theory)</td>
<td>Combination of explicit and implicit</td>
</tr>
<tr>
<td>attendance</td>
<td>1-2 days / week</td>
<td>8-10 days / year</td>
</tr>
</tbody>
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Premises and assumptions II

- Need for bridge the gaps among learning locations, and develop connectivity
- Need for integration of different kind of experiences, knowledge and learning
- In order to build professional competences
Different pedagogical models serve these goals

Integrative pedagogical models
- Expansive learning (Füller & Unwin, 2003)
- Connective model (Guile & Griffiths, 2001; Ludvingsen et al., 2011)
- Hybrid learning environment (Schaap, et al., 2012)

Experiential learning models
(inter alia, Kolb, 1984)

Reflective learning models
(Kember, 2001; Kember et al., 2008; Moon, 1999; Schön, 1983)
Premises and assumptions II

- How to work in an integrative, reflective and experiential way in schools?
The concept of situation

- Consider the concept of *situation*
- Individuals *act and learn* in daily situations that can be
  - Personal-non professional (A)
  - Professional (C)
  - Transitions situations (B)
The concept of situation

<table>
<thead>
<tr>
<th>Title of the situation</th>
<th>Persons involved</th>
<th>Activity</th>
<th>Normes</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
<th>Declarative knowledge</th>
<th>Skills</th>
<th>Attitudes</th>
</tr>
</thead>
</table>

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The concept of competence

- In every-day situations individuals use different resources
  - Declarative / theoretical knowledge
  - Abilities / skills
  - Attitudes / personal resources
- Competent behavior is when the individual combines and mobilizes different resources to manage the situation and its goals.
- Competence is not detachable from the situation
The challenges of SiD

- To transpose **real life situations (LS)** experienced by learners or exemplarly represented as models into **didactical / instructional situations** in which enlarge knowledge, having new understandings and consolidate it

- To integrate explicit subject-knowledge and implicit situational knowledge with a reciprocal sense-making

- To exploit learners’ experiences in a reflective and analytical approach
The virtuous cycle of SiD

LS1
Knowledge and know-how gained from experience

Practice

Theory

Reflective processing (analytical/synthetic)

Practice

Theory

Subject-related knowledge

LS2-n
New / other real experienced situations

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The virtuous cycle of SiD
The macro-phases of SiD

1. PREPARATION
Selection and preparation of life situations (both related or not to work) for transposition into the didactical situation/scenario (micro-phase I)

2. ANALYTICAL PROCESSING
Presentation of the situation, structuring, and identification of resources (micro-phases II e III)

3. SYNTHETIC PROCESSING
Systematisation, expansion and consolidation of necessary resources (micro-phases V e V)

4. EVALUATION
Of learning outcomes including both resources and competences (micro-phase VI)

Recursive process

Recursive process
The micro-phases of SiD

**I. PREPARATION**
- **PHASE I:** Identification of important life situations and decision on how to present them.
- **Instructional question:** What basis is used for selection of life situations and how does selection come about? Who presents the life situations and how?
- **Instructional options:** Should life situations be drawn from training plans or from reality? Who? (Geezers, teachers, testimonials). How? (Narration, videos, photos, simulations, etc.)
- **Result (product):** Teacher decisions and learners' tasks.

**II. ANALYTICAL PROCESSING**
- **PHASE II:** Presentation of life situations in the classroom.
- **Instructional question:** How is the presentation organised in the lesson?
- **Instructional options:** Depending on the steps taken in Phase I, in the classroom, in groups, etc.
- **Result (product):** Presentations with materials and documentation. Notes.

**III. SYNTHETIC PROCESSING**
- **PHASE III:** Structuring of life situations and identification of necessary resources.
- **Instructional question:** What are the characteristic features of the life situation? What knowledge, skills and attitudes are needed?
- **Instructional options:** Variant: through the teacher, through moderated discussion, in groups with brainstorming, etc.
- **Result (product):** Learners' notes, summary documents, etc. Structured list of resources, possibly with reference to other subjects and learning locations.

**IV. EVALUATION**
- **PHASE IV:** Systematisation and teaching of necessary subject-related knowledge.
- **Instructional question:** What (subject-related) knowledge is needed? How is it introduced?
- **Instructional options:** Full repertoire of methods: TBL, PBL, stations, conventional exercises, etc.
- **Result (product):** Learners' notes, summary documents, documents, etc.

- **PHASE V:** Consolidation of resources and competences.
- **Instructional question:** What exercises will be used to:
  a) consolidate
  b) build routines
  c) transfer
- **Instructional options:** Like Phase IV, simulations, project work, case studies, etc.
- **Result (product):** Results of exercises, tests, assessments, feedback from own real experiences, etc.

- **PHASE VI:** Summative evaluation of performance (of resources and competences).
- **Instructional question:** What will be evaluated and how? In relation to:
  a) resources
  b) competences
- **Instructional options:** Forms of summative evaluation: tests, case studies, practical execution of tasks, etc.
- **Result (product):** Assessments, grading, etc.
Example of SiD scenario

Situation: sales discussion;
Profession: commercial employee

Boldrini & Cattaneo, 2013

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Practical simulation

- Discuss how to design and implement a SiD instructional scenario (10-20 lessons)
- Based on a given professional situation
- Based on given learning context
## Practical simulation – Discussion and summary

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<tr>
<th></th>
<th>Situation 1</th>
<th>Situation 2</th>
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<tbody>
<tr>
<td><strong>Preparation</strong></td>
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<tr>
<td></td>
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<td>G2</td>
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<tr>
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<td>G3:</td>
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<td></td>
<td>G3:</td>
<td>G3:</td>
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<tr>
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<tr>
<td></td>
<td>G3:</td>
<td>G3:</td>
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<td><strong>Evaluation</strong></td>
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<td></td>
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<td></td>
<td>G3:</td>
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Teachers’ training implications

How do we at SFIVET train teachers to develop SiD approach in their classes?

- visits and interviews in companies and selection of professional situations
- descriptions of the situations and related resources, and validation by experts in the field
- developing a didactical project to be implemented together with the assessment tools
- use of technological supports to improve the way to bring real situations into the class (videos, photos, etc.).
SFIVET’s method: the holistic situation based approach – the work situation in the heart of learning

Curriculum Development

Work Reality «Work Situation»

Competence of the Apprentice: relevant Knowledge, Skills, Attitudes

Teaching

Evaluation

Assessing
References on SiD


