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- Problem field and theoretical background
  - Globalization: Barriers, Problems and Success Factors
  - Usage of Competences
  - Competencies and Competences
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- Case Study: International E-Learning

- Case Study: IS / Knowledge Management
A starting scenario

Project Idea & Management

Sales, Distribution, Usage, Evaluation

Specification, Realization, Documentation

Cooperation

Are our staff members and graduates prepared?
TeaCamp Study: What makes globally distributed teams successful in your field?

- Personal contacts
- informal interaction
- whole team involvement for constant communication
- good management/manager, strict one
- Deadlines
- respect others opinions and feelings
- ICT competencies
- information literacy
- knowledge management
- effectiveness on intercultural situations based on ones knowledge, skills and motivation
- sending and receiving of messages that are accurate and appropriate
TeaCamp Study: What are the main problems you have encountered in working in a global team?

- Misunderstanding in goals
- very different characters and professionals which might find no consensus
- sometimes lack of good language skills
- some types of collaboration are not well known and acceptable in national environment
- cultural problems
- historical conflicts
- time difference
- concepts different interpretation
- not enough communication
- different working methods
- low motivation
TeaCamp Study: What is the main weakness of new employees / students in your field when working globally?

- Not enough personal initiative and interest
- no global strategic view of the working subject
- usability of the technologies used in e-learning (too little tech. Knowledge)
- they are not taught to collaboration during some studies
- more theoretical knowledge than practice
- they have normally problems with their communication competencies
- not used to work in a different way
- not sufficient knowledge in working / acting globally
Related Concepts (modified, North, 1998)

- **Symbol**
  - +syntax

- **Data**
  - +meaning

- **Information**
  - +context

- **Knowledge**
  - +use

- **Skill**
  - +applying to new settings

- **Competence**
  - +uniqueness

- **Competitiveness**
Competencies

Learning Outcomes defined in the European Qualification Framework as
– “[...] statements of what a learner knows, understands and is able to do on completion of a learning process”

Learning outcomes described by competencies: e.g. will have a strong knowledge of …

We define competencies as a collection of skills, abilities, and attitudes to solve a problem in a given context.
# Sample characteristics

<table>
<thead>
<tr>
<th>Concept</th>
<th>Description</th>
<th>Sample Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competencies</td>
<td>Description of competencies /&amp; learning outcomes to perform a task</td>
<td>Type of competencies, description, subject, level (proficiency level from EQF),</td>
</tr>
<tr>
<td></td>
<td></td>
<td>complexity</td>
</tr>
<tr>
<td>Problem</td>
<td>Description of a problem in which a competency should be applied</td>
<td>Situation description, actors, type of tasks, expected outcomes</td>
</tr>
<tr>
<td>Context</td>
<td>Description of the environment and influence factors in which a competency is applied</td>
<td>Descriptions of cultural (e.g., country, country characteristics), institutional (e.g., Higher Education, enterprise), economic (e.g., time &amp; budget constraints), location (geographic location, environment), technical (technical requirements, systems) context</td>
</tr>
</tbody>
</table>
Use of competences

- Description of Competence Profiles
  - For position or employee
- Targeted lifelong learning and employee development
- Targeted work force building (complementary competences in one group)
- Finding the right employees
Competency or Competence?

- Competency describes a full set of skills, abilities and attitudes
  - E.g. Communication Skills

- Competence describes a single item which can be part of the full set
  - E.g. Ability to read

- Both terms often mixed up
Competence Descriptions

- Problematic

- No standardized way

- Still open questions, such as: How to combine different competences?

- One option proposed by Paquette (2007)
### Possible Description

<table>
<thead>
<tr>
<th>Generic Skills Classes</th>
<th>Active knowledge (Pitrat)</th>
<th>Generic problems (KADS)</th>
<th>Cognitive objectives (Bloom)</th>
<th>Skills cycle (Romiszowski)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Acknowledge</strong></td>
<td></td>
<td></td>
<td></td>
<td>Attention</td>
</tr>
<tr>
<td>2. Integrate</td>
<td>2.1 Identify</td>
<td>2.2 Memorize</td>
<td></td>
<td>Perceptual acuteness and discrimination</td>
</tr>
<tr>
<td>3. Instantiate/Specify</td>
<td>3.1 Illustrate</td>
<td>3.2 Discriminate</td>
<td>Knowledge Search and Storage</td>
<td>Interpretation</td>
</tr>
<tr>
<td>4. Transpose/Translate</td>
<td>4.1 Use</td>
<td>4.2 Simulate</td>
<td>Knowledge Use, Expression</td>
<td>Procedure Recall</td>
</tr>
<tr>
<td>5. Apply</td>
<td>5.1 Deduce</td>
<td>5.2 Classify</td>
<td>Prediction, Supervision, Classification, Diagnosis</td>
<td>Schema Recall</td>
</tr>
<tr>
<td>6. Analyze</td>
<td>6.1 Deduce</td>
<td>6.2 Classify</td>
<td>Knowledge Discovery</td>
<td>Analyze</td>
</tr>
<tr>
<td>7. Repair</td>
<td>7.1 Deduce</td>
<td>7.2 Classify</td>
<td>Knowledge Discovery</td>
<td>Analysis</td>
</tr>
<tr>
<td>8. Synthesize</td>
<td>8.1 Induce</td>
<td>8.2 Plan</td>
<td>Planning, Design, Modeling</td>
<td>Synthesis</td>
</tr>
<tr>
<td>10. Self-control</td>
<td>10.1 Initiate/Influence</td>
<td>10.2 Adapt/control</td>
<td></td>
<td>Initiation, Continuation, Control</td>
</tr>
</tbody>
</table>

Problems of the term “competence”

- Humans usually not really familiar to think about competences
- Competences depending strongly on the context
- Often thinking rather in “problems” than competences

Therefore description of:
- **Competences** containing skills, abilities and attitudes at a certain level of complexity.
- **Problems** denoting situation in which competencies are applied and
- **Context** in which the problem solving is performed.
Assessment of Competences and different proficiency levels

- Standardized form of competence assessment necessary

- European Qualifications Framework (EQF)
  - to facilitate comparison of qualifications and qualifications levels
  - 8 levels for each competence / skill
Realization of the concepts

- How can the competence concept and competence profiles be used in the work life?
- How can we overcome problems with the term competence?
Globalization competences

According to Stier (2006) six areas of intercultural competences (the six “c”)

- Communicative
- Cooperative
- Confidence
- Commitment
- Critical thinking
- Comparability
Competencies (derived from culture models)

- Competence to understand and use of …
  - Power distance / teachers role
  - Individualism / role of collaboration
  - Accommodation of individual differences
  - Uncertainty avoidance
  - Long-term and goal orientation
  - Program flexibility
  - Motivation (extrinsic / extrinsic)
  - Value of errors
  - Learner Control
  - User activity
  - Cooperative Learning
  - Cultural sensitivity
Competence Categories

- **Domain specific competences** focusing on domain competences adapted for the international context.

- **ICT competences / Literacy** ranging from basic computer skills and skills to operate different programs to more complex knowledge about IT Architectures, Security and Management and Information retrieval.

- **Project Management and Leadership competences**, which could also be referred to as Coordination competences, covering areas such as basic business competences, team management and work distribution.

- **Collaboration and Knowledge Management competences** including knowledge sharing and transfer as well as work attitudes in an international team.

- **Communication competences** which focus strictly on the exchange of messages and information in verbal and written form including choice of communication style and management of communication.

- **Intercultural competences** including cultural awareness and understanding of cultural differences.
Case Study – International IS / Knowledge Management

- Target: Internationalization of the IS curriculum to enable graduates to work in the global environment
- Analysis of existing curricula for domain specific and international competences
- Several studies to get to a consensus of the new curriculum
Additional categories

- Language competencies
- Emotional competencies (willingness, motivation etc.)
- Business competencies
Internationalization Competences

Communication
- Ability to communicate sensitively taking into account other personalities and cultures
- Ability to listen to others and consider their thoughts
- Ability to communicate clearly and articulately
- Ability to focus on key points during communication

Collaboration
- Ability to build national and international relationships and networks on a professional level
- Ability to share information and knowledge with the team
- Ability to collaborative problem resolution
- Ability to understand other peoples perspectives, needs

Project Management
- Ability to manage own work
- Ability to use other peoples expertise and knowledge
- Ability to take responsibility
- Ability to make decisions

Culture
- Foreign language skills (e.g. English)
- Understanding of the influences and implications culture has in work life
- Ability to adjust to different cultures
- Ability to evaluate perspectives, practices and products from multiple cultural perspectives

ICT
- Ability to align ICT with the business requirements
- Understanding of importance and limitations of different information sources
- Ability to find quality information with the help of ICT
- Ability to identify problems with ICT

IS Competences
- Subject A
- Subject B
- Subject C
- Subject D

Related Subject Competences
- Business
- ...
Competence mapping

- Describe the problem / challenge / success factor
  - Success factors
  - Culture models
  - ...

- Describe the competence using competence vocabulary and derive the complexity

- Map competence profiles to actors to be recruited
Summary

- Concepts of Competency and Competence problematic (Differences, Understanding etc.)
- Internationalization of the competence set necessary to be successful in a global world
- This internationalization still not done
- Different options for the usage of competence-based approaches
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Analysis

- Analyzing the influence of culture on Virtual mobility

- Analysis grid
  - Relating culture models to Virtual Mobility curriculum / competencies
  - Relating cultural competencies to Virtual Mobility curriculum / competencies

- Combined with detailed questionnaire
## Analysis Grid #2:
### Domain vs. cultural aspects

<table>
<thead>
<tr>
<th>Learning Strategies</th>
<th>Intercultural Communication</th>
<th>International Collaboration</th>
<th>Coordination / International Project Management</th>
<th>ICT Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Assessment Strategies</td>
<td></td>
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## Analysis Grid #2.1: Global vs. domain competencies

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# Analysis Grid #2.2: Global vs. domain competencies

<table>
<thead>
<tr>
<th></th>
<th>Motivation (extrinsic / extrinsic)</th>
<th>Value of errors</th>
<th>Learner Control</th>
<th>User activity</th>
<th>Cooperative Learning</th>
<th>Cultural sensitivity</th>
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