Competence-oriented Course Evaluation and Follow-up Measures

Educational and Student Services
University of Graz

www.uni-graz.at/lss

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Istanbul, Oktober 13th, 2009
Presentation Outline

1.) The University of Graz – the Context
   - Implementation of the Bologna Process
   - Background for the Development of a new Course Evaluation

2.) GEKo - Instrument for the Evaluation of Competences

3.) Follow-up Measure – Didactic Pool
University of Graz

- founded in 1585
- 6 faculties
- 26,000 students, 3,600 beginners
- 2,500 graduates (260 doctorate) per year
- 3,200 employees (thereof 2,200 in science)
- 103 study programs
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Implementing Bologna

- legal framework: University Act 2002
- legal regulations of the University (statutes)

Since 2002:
Focus of the Vice Rectorate for International Relations and
the Vice Rectorate of Teaching and Learning

Quality Management & Quality Assurance (e.g. workload
evaluation, bachelor survey, course evaluation & follow-up)
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I taught Tiger how to whistle.

I do not hear him whistling.

I only said I taught him. Not that he's learnt it.
Background for the development of a new course evaluation

Organisational framework:
• New structures (keyword Bologna)
• Definition of competences (e.g. European Qualification Framework EQF)

Changing aims of teaching quality:
• Shift towards learning outcomes and competences

Methodical problems of the „old“ instrument for course evaluation:
• Focus on lecturers
• Inadequate differentiations
• Not suitable for different types of courses
Learning outcomes are …

…important for recognition.

The principal question asked of the student or the graduate will therefore no longer be “what did you do to obtain your degree?” but rather “what can you do now that you have obtained your degree?”

(Council of Europe, 2002)

… are statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning.

(ECTS User's guide, 2005)
Aims of study programs, modules, courses…

Aquirement of action competence

general problem-solving ability
critical thinking skills
domain-general and domain-specific knowledge
realistic, positive self-confidence
social competences
The project: Developing a new Course Evaluation

**Duration:** September 2005 until December 2006

**Head of the project:** Prof. Dr. Manuela Paechter (Department of Psychology)

**Organizational support:** Academy for New Media & Knowledge Transfer

**Realization:** Department of Educational and Student Services
Experts of all faculties, administrative departments and student union
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GEKo – Evaluation of Competences

GEKo – Grazer Evaluationsmodell des Kompetenzerwerbs

What is it?
Student’s reflection on his/her gained competences
Teacher’s reflection on his/her aims of the courses

What’s new?
• Focus on students
• Comprises organisational variables
• Comprises personal variables of students (previous knowledge etc.)
• Different questionnaires for different types of courses
• Questionnaires for students and lecturers
GEKo – Evaluation of competences

Working Steps 1 - 9:

1. **qualitative questionnaires**: students and lecturers named skills and competences that should be acquired after attending courses/graduation
2. **analysis of curricula**: extraction of skills
3. **literature research**: psychology, educational sciences etc.
GEKo – Evaluation of competences

Concepts of competences

|----------------|----------------|-----------------|
| **Action skills:**  
  • professional competence  
  • methodical competence  
  • social competence  
  • moral competence | **Action competences:**  
  • professional competence  
  • multidisciplinary competence  
  • motivational and emotional competence | **Action competences/key qualifications:**  
  • professional competence  
  • methodical competence  
  • social competence  
  • personal competence |
GEKo – Evaluation of competences

Working Steps 1 - 9:

1. **qualitative questionnaires**: students and lecturers named skills and competences that should be acquired after attending courses/graduation
2. **analysis of curricula**: extraction of skills
3. **literature research**: psychology, educational sciences etc.

⇒ extraction and matching of 5 basic competences
⇒ 10 items on each basic competence
GEKo – Evaluation of competences

- general and specific knowledge, facts
- explaining theories
- linking and distinguishing facts and theories
- joint learning, team working
- taking over responsibilities in groups
- applying facts, theories
- solving problems
- making decisions
- acquiring information independently
- organizing learning processes
- choosing learning strategies
- evaluating working achievements/results

Use of New Media: assisting other competences

Paechter et al., 2006
GEKo – Evaluation of competences

Examples for items:

I can give an overview of the topics of the course. (professional competence)
I can apply my gained knowledge to different problems. (methodical competence)
Now it’s easier for me to take responsibility in a group. (social competence)
In this course I’ve learned to check my own learning progress. (personal competence)
I’ve gained skills in virtual communication. (media competence)

1…………… 2 …………… 3 …………… 4 …………… 5 …………… 6
I strongly disagree                                            I strongly agree
GEKo – Evaluation of competences

Working Steps 4 - 9:

4. **pretesting of items** (item differentiation, factor analysis etc.):
   reduction of numbers of items

5. **validation**: 2.131 questionnaires
   - on individual basis
   - on basis of means of courses

6. **questionnaire for lecturers**

7. **testing for objectivity**: compare students‘ self-evaluation and objective performance tests

8. **confirmatory factor analysis**

9. **HLM**
GEKo – Evaluation of competences

Different questionnaires for different types of courses:

- **instructor-oriented** courses: e.g. lectures
- **interactive** courses: e.g. seminars, exercises
- **language-oriented** courses: courses that are related with foreign languages
- Courses with emphasis on **practical training**: e.g. laboratories
  
  & **media-based** courses
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From Teaching to Learning (1)

<table>
<thead>
<tr>
<th>Instructor-centric teaching</th>
<th>Student-centric teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Instructor is center</td>
<td>• Student is center</td>
</tr>
<tr>
<td>• Transmission of information on the part of instructors</td>
<td>• Active acquisition of knowledge on the part of students</td>
</tr>
<tr>
<td>• The learning path is general, firm and standardized</td>
<td>• There are different ways of learning</td>
</tr>
<tr>
<td>• Instructors for students</td>
<td>• Student is self-controlling</td>
</tr>
<tr>
<td>• Lecturer explains the correct answers to problems</td>
<td>• Lecturer asks questions, answers given by students</td>
</tr>
</tbody>
</table>
From Teaching to Learning (2)

<table>
<thead>
<tr>
<th>Lecturer directs learning</th>
<th>Lecturer accompanies learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static and unchanging</td>
<td>Dynamic and fluctuating</td>
</tr>
<tr>
<td>Instructors and students face each other</td>
<td>Instructors and students work together</td>
</tr>
<tr>
<td>Study design is based on tests</td>
<td>Study plans based on feedback loops</td>
</tr>
<tr>
<td>Students cannot participate in all sessions of a course</td>
<td>Gaining importance of social skills</td>
</tr>
<tr>
<td>Control by exams</td>
<td>Immanent control</td>
</tr>
</tbody>
</table>

cf. Blom, 2000
Extending Skills of the Instructors

• competences and skills students should have gained at the end and how they can be achieved should be taken into consideration

• helping the instructors to accomplish the paradigm shift

• not only input but both input and output are equally important

Pilot project: Didactic pool

support for instructors in didactics and the organization of courses
Stages of the Project

1. Professional input
   • accompanied by a professional trainer
   • defining of course goals in an output-oriented way
   • forming peer-groups

2. Practice/Application
   • guest listener giving feedback
   • keeping in touch through a web platform

3. Professional feedback
   • sharing experiences
   • receiving professional feedback
Department Educational and Student Services (LSS)

Thank you for your attention!

Further information:
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