«Research-based Teaching and Learning | A LERU project»

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Topics | Overview

- Framework / underlying tenets of the paper
- Main principles in the paper
- Next steps
Project Research-based Teaching and Learning | Intentions

- To define the topic so as to create a common basis of understanding for the discussion and exchange of views within the LERU

- To develop a modern concept of the Teaching-Research-Nexus in research-intensive universities

- To exchange examples of “good-practice” of Research-based Teaching and Learning within the LERU

Expressions

- Research-led Teaching
- Research-oriented Teaching
- Research-enriched Teaching
- Teaching-Research Nexus
- Etc.

The Relation between Teaching and Research can be seen in different ways!
Educational goals in Research-oriented Universities | Underlying tenets

- Goals of university study
  - Clarify existing knowledge, debate questions, generate new knowledge: The acquisition of knowledge, an understanding of the approaches to it and its limits, are core values of the university community
  - Personal development as part of the process of critical scholarly analysis: University education makes a contribution towards the development of an academic personality.

Teaching-Research-Nexus as the basis for the achievement of the educational goals (Principle 2)

«The goal of education at research-intensive universities is to provide students with the capacity for academic thinking. For university education to be effective it must take place as part of an informed and critical dialogue in conformity with the highest standards of scholarship and research. Research-based teaching promotes a scholarly approach dedicated to the attainment of knowledge, that upholds core academic values. Research-based teaching promotes the education of students and their attainment of academic expertise.»
Three levels of the Teaching-Research-Nexus

- A methodological approach to teaching and learning (in concrete teaching-learning sequences). For example:
  - To enable research-based learning
  - To exemplify research expertise (through the role of researcher and lecturer)
  - To thematize scholarship and research

- A principle governing the curriculum of study programs. For example:
  - Research-orientation in all phases of study
  - Opportunities for individual initiative

- A institutional strategy. For example:
  - Mission statement and quality development
  - Staff selection and development
  - Infrastructure and general conditions

Research process | Student activities

- Formulating a general question

- Overview of research-literature

- Defining the question

- Planning research activities, clarifying methods/methodologies

- Undertaking investigation, analyzing data

- Interpretation and consideration of results

- Report and presentation of results
**Research results | Assessment of student learning**

**Research process: Student activities**
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**Products of research: Assessment of student learning**
- Discussion-Paper, …
- Overview-Report, …
- …
- …
- Report of the results, …
- Poster-Presentation, …

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**Research-Process as Reference Point | Framework**

<table>
<thead>
<tr>
<th>Study levels</th>
<th>Formats of teaching and learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Lecture, Seminar, Laboratory</td>
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<tr>
<td></td>
<td>Internship, Conferences</td>
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<tr>
<td>M</td>
<td>Final thesis</td>
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Professionalism in Teaching

“Operation”: Flexibility and well-worn routine
“Reflection”: well-founded decisions, systematic explications

Research into your own didactic methods – improving your teaching expertise

Research-based Teaching and Learning and …
(Chapter 4 of the dossier)

- **Disciplines**
  - Different research methodologies (for example: Text based disciplines vs. experiment-based disciplines). Research-based Teaching and Learning takes account of the particular characteristics of each individual academic discipline.

- **Study level**
  - Specific individual research tasks appropriate to the study level. Integration in the overall research process.

- Example: Academic exchange
Three aspects are evaluated in the questionnaire for students (course-level)
- The teacher as research facilitator of and expert
- Student research activities
- Research and scholarship as topics

Some questions for program-directors to improve the curriculum (program-level; draft)
- Every step in the research process is included
- …

Implications

Example: «Employability»

Example: Applying for Admission to a specific study level
Next steps

- Collecting examples from within LERU to illustrate the principles of research-based teaching and learning

- Integration of the suggestions made by the Rectors Meeting and the Steering Group

- New Version of the Dossier in November (Rectors Meeting in London)

- Research-based Teaching and Learning as «central development project»: «The goal is to promote an exchange of views at institutional level that provides for the integration of the experiences and expert knowledge of all participating universities.» (Principle 7)