OBJECTIVES OF INQUIRY LEARNING FOR FIRST-YEAR STUDENTS - CASE STUDIES FROM GERMANY

THEORETICAL CONCEPTION

<table>
<thead>
<tr>
<th>Education through Research</th>
<th>Research-Teaching-Nexus</th>
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approaches are not commensurable

Simona & Elen 2007

RESEARCH DESIGN

Method: Case studies

Main principle: Rich description of single cases (conclusion are done through narration in contrast to theoretical-generalised connection)

Research question: Which aims do we find in existing first-year undergraduate research projects?

First step: Identification of 20 projects aiming at inquiry learning for first year students

Second step: In-depth interviews and document analyses

Third step: Creation of rich description for typical cases

RESULTS

University of Oldenburg

University of Applied Sciences Nürtingen-Geislingen

University Staff change their courses towards inquiry learning, i.e. students complete a research process in class

To improve learning outcomes

To develop competencies for the job market

To create a link to the “outside world”

University Project

Team Research - teacher/student collaboration (voluntary)

Teacher education

Regular courses in inquiry mode (depending on teacher)

Economic and Environmental Sciences

all years

Aims of inquiry learning

To facilitate the entry into the science system

To provide an understanding of scientific practice within the respective discipline

To provide an insight into other disciplines

To mark the difference between school and academic education

To form a rite of passage towards a disciplinary identity

Students elaborate research questions that derive from teacher’s practice in schools

Ideals of inquiry learning

To empower the formation of a scientific attitude

Do notallest from common theories

To act in a professional way

To develop a critical eye on one’s own actions

University Project

Forschungsorientierung in der Studieneingangsphase (FideS) is the Latin word for trust/confidence. In FideS, we are investigating projects in Germany that show confidence in the abilities of first year students to perform research. The project is funded by the Federal Ministry of Education and Research. Its consortium consists of the University of Hamburg, the University of Potsdam and the University of Technology Kaiserslautern. Our research aim is to (re)frame inquiry learning theoretically and empirically through case studies of 20 projects that develop inquiry learning in the study entry phase. We are especially interested in the differences between disciplines as well as the relation between e-learning and inquiry learning. Furthermore, we target insights into the effects of research on learning. Our last step will be the development of recommendations and instructions validated by experts.

Background - FideS-Project:

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CONCLUSIONS:

- Co-existence of functional and ideological approaches in projects (often an idealistic foundation of the projects with a functional implementation)
- Different views of stakeholders influenced by their position or own academic education (e.g. teachers / researchers favour the idealistic approach due to their own previous education)
- Functional implementation due to funding schemes (funding agencies prefer evidence based schemes) / outcome orientated curriculum structure
- Idealistic foundation as a reaction towards the Bologna Process / as an unique feature in the competition for students

Dr. Eileen Lübke // Anna Heudorfer, M.A. // Hamburg Centre for University Teaching and Learning (HUL)