

Towards a Competence Framework for the Roles of Teachers in Interdisciplinary and Flexible Education

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Project

“Higher education teachers might be the most comfortable with teacher-guided methods, since giving talks is part of what they learn to excel at when pursuing a scientific career.”

Fischer, E., and M. Hanze (2019)

Problem statement

The goals of this research are **to map the necessary equipment** (competences, skills, and attitude) for the different **roles of teachers** in interdisciplinary and flexible education (IFE) and **to develop ways of getting equipped and evaluating success**. The project will therefore **theoretically systematize and empirically inventorize** different teacher roles and **specify what competences, skills, and attitude are needed for teachers to be effective in IFE**.

Research Process: Methodology

- Systematic approach
 - Snowballing approach
 - Keywords
- 40 papers reviewed

Research Process:

Literature is focussed on:

1. Interdisciplinary research
2. Discussions about the definition and meaning of interdisciplinarity
3. Student competences
4. Design of interdisciplinary courses, curriculum, and education
5. Teaching interdisciplinarity, but with a special focus on approaches, strategies, and assessment

Research Process:

Finding: There is a gap in knowledge on how to teach interdisciplinarity, *specifically about the competences, skills, and attitudes that teachers need.*

Some perspectives

“Interdisciplinary pedagogy, then, is not synonymous with a single process, set of skills, method, or technique. Instead, it is concerned primarily with fostering in students a sense of self-authorship and a situated, partial and perspectival notion of knowledge that they can use to respond to complex questions, issues or problems, while it necessarily entails the cultivation of the many cognitive skills such as differentiating, reconciling, and synthesising [...] it also involves much more, including the promotion of student’s interpersonal and intrapersonal learning. Because interdisciplinarity is a complicated psychological and cognitive process, it cannot be taught with one approach.”

(Carolyn Haynes, 2002, p. xvi)

Some perspectives

“interdisciplinary teaching and learning do not claim any unique set of pedagogies. Instead, **interdisciplinary teachers employ an array of instructional methods to support interdisciplinary learning outcomes.**”

(Deborah DeZure, 2017, p. 558)

Findings: Skills

- Active listening
- Asking (critical) questions
- Facilitation
- Soft skills
- Communication and collaboration
- Feedback and encouragement
- Creating a safe and constructive learning environment/
learning conditions
- Imaginitive
- Patient and supportive
- Disciplinary and interdisciplinary awareness

Findings: Roles

- Tutor
- Coach
- Facilitator
- Guide
- Modeler
- Monitor
- Process manager
- Supporter

Findings: Attitudes

- Critical
- Reflective
- Flexible
- Adopt an open attitude, non-dogmatic thinking
- Uncertain
- Discomfort
- A 'thirst' for learning
- Patient and supportive
- Enthusiatic

| Skills | Roles | Attitudes |
|--|--|---|
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