

Promoting students' competencies: university and industry jointly create and implement competence-oriented curricula in the case of cooperative study programs

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Background

- Cooperative study programs as growing and niche phenomenon of the German higher education sector (Mordhost & Nickel, 2019)
- Applied-oriented study formats are seen as relevant by labor markets and policy makers in Germany (Wissenschaftsrat, 2013)
- Cooperative study programs as part of a hybridization process between vocational training and higher education in Germany (Graf, 2013)
- Joint coordination of curricula of cooperative study programs indicates challenge for university and industry (Hesser, Langfeldt & Box, 2018)
- Purpose of the DASCHE project is to identify model approaches that address social competence promotion in curricula (DASCHE, 2018)

Theoretical background

- Conceptualizing cooperative study programs:
 - Didactic perception by Kolb's (1984) learning cycle approach (Fig. 01)
 - Structural definition by Krone et al. (2015) (Fig. 02):
"Cooperative study programs are defined as linkage between academic teaching at a university and workplace training at an enterprise facility. Thus, academic teaching and practical training relate to each other on the content level as well as on the organizational level."
- Employability term reflects social competence building according to professional requirements (Hillage & Pollard, 1998)
- Stakeholder Theory captures dynamics of actors (Freeman, 1984, 2010)

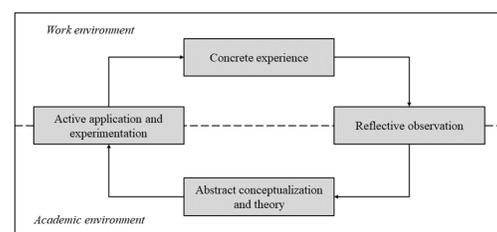


Fig. 01: "Kolb's experimental learning cycle" as theoretical framework for visualizing the nature of cooperative study programs; Authors representation based on Kolb (1984)



Fig. 02: Structural conception of cooperative study programs; Authors representation based on the definition provided by Krone et al. (2015)

Findings

- Higher education act Baden-Wuerttemberg imposes a specific university mission in study offers referring to the "dual principle" (university education in cooperation with companies and social sector institutions)
- An "obligatory competence-model" of the university ensures competence-oriented teaching and is anchored in the university's mission statement
- The competence model is applied to the modules and this results in a competence-oriented curriculum design and module manuals include workplace training phases as well
- Alternating learning venues in the study programs provide a systematic change of learning contexts of students: three months academic teaching at university and three months workplace training (rhythm within six semesters)
- University's didactic principle promotes the competence model:
 - Teaching in small groups with not more than 30 students each group
 - Teaching is carried out by professors and lecturers from working practice
- Implementation of the study programs and student support is linked to personal responsibility (at the level of study programs):
 - Program coordinator (professor) conducts and maintains course of studies
 - Practical supervisor ensures workplace training within course of studies

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Aim and research question

The aim ist to gather an understanding of how joint coordination works in the case of cooperative study programs and how competence development of students is promoted. Thus, we pose the following research question:

- How is competence development of students in cooperative study programs promoted and what role does social competence play therein?

Methods

- Single-case study (Yin, 2014): DHBW as original example of cooperative study programs in Germany (Thies, 2015)
- Application of triangulation logic (Flick, 2011): semi-structured interviews and document analysis as multiple data sources
- Data analysis: qualitative content analysis (Mayring, 2015)
- Operationalization of the term "social competence": social competence is understood in a professional context as the assumption of responsibility in order to be able to act successfully in a team; as integral part of the cooperative study programs this is systematically addressed in the course of studies and thus trained in an academic environment and in a professional environment

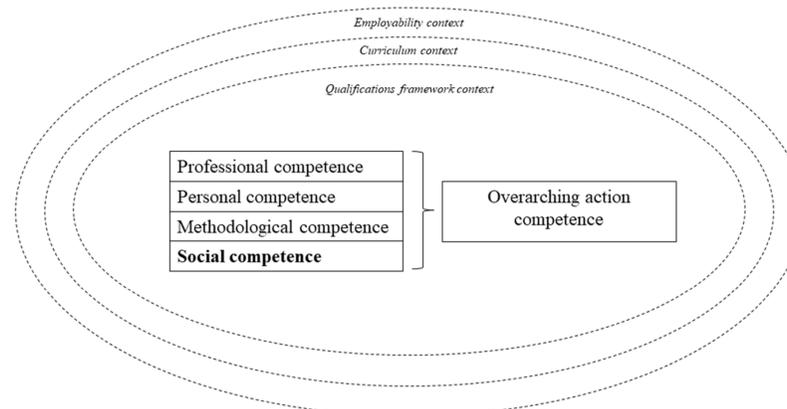


Fig. 03: The binding competence model ensures a standardization of competence building and is embedded in different contexts in order to address overarching action competence for professions in the case of cooperative study programs; Authors representation based on data analysis

Discussion and conclusion

- Structural design (meso level) in combination with personal responsibility (micro level) promotes development of students competencies
- The design of study programs according to the "dual principle" enables students to develop competencies in an academic context and in a professional context at the same time
- Understanding of social competence is strongly linked to the professional role of students and refers to the employability term as part of the educational mission of the case-study university

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