Metacompetence as an Educational Goal of Future-Oriented Higher Education

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ABSTRACT

Societies have faced steadily growing challenges in recent decades. Global climate change, demographic shifts and geopolitical conflicts are constantly creating new framework conditions for companies and organisations that need to be mastered (Faix et al., 2021). In order to be able to operate successfully in the long term, companies and organisations need specialists with meta-skills to recognise, initiate and successfully implement the necessary transformation processes in social systems (Bergmann, 2016). Furthermore, the social impact means that students are increasingly demanding their right to social participation and far-reaching co-determination (Bäuerle et al., 2021). The research question is therefore: "What content and with what methods should students learn in order to be able to solve future problems and challenges in social systems?". An educational project at the University of Siegen serves as a case study to identify didactic methods and learning content that support such skills development among students in the social sciences. This would enable universities to meet the growing demand for specialists on the one hand and the desire for individual freedom and social participation among students on the other. Methodologically, this work is based on three theories: the capability approach, social systems theory and learning theory. Amartya Sen and Martha Nussbaum postulate within the framework of the capability approach that a lack of individual freedom or choice reduces the resulting opportunities for realisation and prevents learning and thus also competence development (Nussbaum, 2012). When working with social systems, the psychological perspective of systems theory in the form of systemic therapy in counselling people and organisations represents a central link between organisations with their actors and an external influence (Simon, 2014). Thirdly, learning research has constantly produced new explanatory models for the process of learning with regard to the development of skills and competences. Competence develops from learning as maturation with the aim of developing an individual problem-solving ability beyond the knowledge learnt (Bergmann, 2006). There is currently a lack of knowledge about how the development of competences to accompany change processes of social systems can be implemented in university education formats and thus forms a research gap (Löw-Beer, 2023).

Keywords: Capability-approach, Social systems, Organizational development, Meta-competencies, Future-oriented education

INTRODUCTION

Societies and Organizations are constantly facing new and dynamic conditions due to climate change, artificial intelligence, demographic and

educational changes, geopolitical disputes, and environmental regulations (Faix et al., 2021). In this paper, Societies and Organizations are understood as social systems, so both terms are used synonymously. In order to operate successfully in the long term, they therefore need employees as specialists who possess particularly far-reaching and networked competencies (meta-competencies) in order to be able to recognize, initiate and successfully implement necessary transformation processes in social systems in response to growing challenges. Universities and colleges, with their educational policy orientation, are well suited to train such specialists. At present, however, there is a lack of research on how overarching skills for accompanying change processes in social systems could be implemented in university education formats. The training of such a meta-competence could build on the capability approach as an empowerment approach and the right to social participation and co-determination (Sen, 2012) and thus represents a research gap.

The research question is therefore "What content and methods should students learn in order to be able to solve future problems and challenges in social systems? The focus lies on the individual competencies and skills that students develop in the course of an educational project, as well as on the effect of the didactic methods used.

In order to answer the research question, an educational project at the University of Siegen, which has been carried out regularly for 10 years, was investigated. In this educational project, a small group of students conducts a cultural analysis within a company or organization (social systems) during one semester. Methodologically, two types of qualitative data were collected: first, interviews with the students and second, transcripts of interviews with the company representatives of all the companies who participated in the project. In the course of this research project, 30 interviews with students and 5 transcripts/protocols of workshops with company representatives of social systems were conducted and analyzed during the last year. The interviews were conducted before and after the educational project, while the transcripts with the company representatives were compiled and analyzed after the research. The interviews with the students focused on the combination of didactic methods and their effect on the development of skills in working with social systems. In the transcripts/records of the workshops with the company representatives, the reactions of the social systems studied were to be recorded and interpreted with regard to the changes and reactions resulting from the work of the student group.

The aim of the study is to be able to make statements about the content and didactic methods used to develop students' meta skills as part of a university education. On the basis of these acquired meta-competencies, necessary change processes in social systems can then be successfully recorded, planned and accompanied.

THEORETICAL BACKROUND

At the latest since the Bologna reform, the need for a practice-oriented education with a strong focus on the downstream labor market has steadily increased. The requirements of the Bologna reform for competence-oriented

teaching, in which teaching and learning processes are to be designed in such a way that students acquire specific skills that they need in their professional and (!) social activities, do not seem to have been achieved in their practical implementation so far (Hericks, 2018).

Current higher education research shows that students currently act as passive recipients of a narrowly defined educational offer, which they have to reproduce in standardized examination forms (Bäuerle et al., 2020). The educational offer is generally not geared to the personal development of the student as an individual. As a result, it does not provide a needs-based education and does not adequately prepare students for their future lives. In the Bologna reform, the concept of employability was called for as an important development for the future. Employability as "[...] the ability to adapt and use technical, social and methodological skills in a targeted and independent manner in order to obtain or retain employment" (Rump & Eilers, 2006).

With regard to the right of every student to choose and to be allowed to learn the content and methods that he as an individual believes he needs in his own life, there seems to be a need for improvement here. On the other hand, Societies and Organizations are social systems with their laws regarding their possibilities for development and influence and the systemic thinking derived from this with regard to change consulting for social systems (Simon, 2014).

This research project is therefore based on three theories that deal with the creation of better framework conditions for future-oriented learning: the capability approach, social systems theory and learning theory. The capability approach examines different forms of action and existence that are associated with the free decision to choose an individual way of life that is considered desirable (Otto & Ziegler, 2010). Thus, learning with a focus on the current and future needs of social systems represents the offer of such oriented learning contexts with the result of competence development of students (Bäuerle et al., 2020).

The capability approach, as a theory of empowerment, provides the foundations upon which individual skill development can be based. Amartya Sen and Martha Nussbaum postulate that a lack of individual freedom or choice and the resulting opportunities for realization reduce learning and thus also prevent competence development (Sen, 2000). The second central area of research is the theory of social systems with systemic/psychological organizational development. The psychological perspective of systems theory in the form of systemic therapy in consulting with people and organizations represents a central link between organizations with their actors and the influence of the outside world when working on social systems with regard to learning opportunities and adaptation aids (Simon, 2014). The third theory, learning research, states that competence develops through learning with the goal of developing an individual's ability to solve problems beyond the acquired knowledge (Bergmann, 2006). To achieve this, learning environments must be designed to facilitate learning processes. The capability approach bridges the gap between social systems theory and learning theory.

METHODOLOGY

For the qualitative study of this research, two types of qualitative data will be collected: on the one hand interviews to measure the students' competence development and, on the other hand, workshop protocols with company representatives (social systems) to record the reactions of the social systems to the research of the student group. The research of the students' development was carried out through qualitative interviews in which the individual developmental characteristics of the group of students in terms of their learning and skill development were recorded. The interviews were conducted before and after the course. In order to examine which competencies are still used in their professional careers and are therefore applicable in a social system, students who have completed their higher education and are in their first professional position were also interviewed. In addition to the students' competence development, the interviews also examined the relationship between the didactic methods and the students' competence development.

The data collected in the form of interviews will be analyzed using Mayring's qualitative content analysis. (Mayring, 2010). Qualitative content analysis is a systematic evaluation method for texts within empirical social research, which is based on the hermeneutic tradition (Krüger & Riemeier, 2014). The material is understood as an objectification of social reality, in which the interviewee's individual ideas about a certain aspect are reconstructed.

In order to be able to evaluate the reactions and changes in the Societies and Organizations as social systems themselves, the method of thick description according to Clifford Geertz is applied (Geertz, 1983). Here, the recorded events in the form of communication within a social system are understood as meaning distinctions, which can then be interpreted as a narrative (Ellrich, 1999). Through the hermeneutic way of thinking, in which protocols as texts are to be interpreted as expressions of human discourses, practices and behaviors, culture can conversely be read and interpreted through discourses, practices and behaviors (Geertz, 1983).

EXPECTED RESULTS

This research project is currently in the analysis phase. The results of this research project should provide starting points for future methods of training social science students at universities. The aim is to enable students to initiate sustainable change in social systems, so that social systems should been enabled to cope with current and future challenges. An important goal is the active and conscious involvement of people in the future design of social systems and thus the creation of social participation. The results to date indicate that students are able to influence social systems in a sustainable and targeted manner as part of a university training project on the basis of the methods learnt.

The didactic methods used are primarily based on the framework conditions of the individual learning content. In addition to didactic and methodological elements at the formal level, the freedom of the individual to satisfy

their individual learning and competence development needs and the availability of a variety of competences appear to be essential for successful intervention in social systems. Some of the didactic methods used are listed below.

Relation to Practical Tasks

The direct reference to real-life tasks in cooperation with companies and organisations provides students with an ideal training space to apply their previous theoretical knowledge and actively apply the learning content offered as part of the educational project under investigation. What is particularly relevant here is the opportunity to "try out" their own ideas and approaches in order to be able to solve the task set. The basis for this is an open educational space, without predetermined solution expectations and fixed procedures.

Freedom of Action and Self-Determination

The concept of "freedom" appears to be of central importance for the students' own and thus individual skills development. Freedom is seen both as a framework condition and as a challenge to develop personally in the context of the educational project. However, there are differences in perception between Bachelor's and Master's students. Bachelor's students tend to perceive the freedom as an additional burden in their structured studies, while Master's students use and value the freedom for their own development and skills growth. The interviewees describe the freedom to decide for themselves what and how something is learnt as an existential basis for their further development.

Didactically, therefore, only a theoretical basis for possible solutions should be presented within an educational project. The design of questionnaires, procedures, group organisation, distribution of tasks, communication and coordination with the participating companies can therefore be carried out by the students themselves. After teaching the basics, the lecturer's task is primarily limited to weekly consultation hours and coaching groups and individuals. Self-determination - as a feature of freedom - appears to be a "sensor/indicator" of one's own needs and abilities, enabling individuals to make their own choices. Students tend to orientate themselves more towards their individual wishes and inclinations within a group, thus ensuring an individually designed skills portfolio.

Diversity of Individual Competences

With regard to competences, individual diversity within a student group appears to be crucial in order to be able to trigger change processes in social systems and further develop one's own competences. In the interviews, the company representatives report on individual students and their different competences that they noticed during the collaboration. The lack of these skills on the company side is subsequently recognised as a potential deficit that should be remedied. The distinct competences of the individual group members appear to be particularly relevant in moderated discussions within

the group. From a didactic point of view, this can be supported by students from different fields of study and focus areas, so that there are different academic backgrounds mixed within the project groups.

CONCLUSION

This research is currently in the evaluation phase, so more concrete answers to the research question can be expected in the future. With the knowledge gained, initial corrections could be made to both educational content and methods at universities and colleges that are orientated towards the needs of change processes in social systems. The existing higher education system does not currently provide for the individual freedom of students in learning and skills development as mentioned above. The premises and requirements for education and skills development are primarily geared towards the needs of the labour market and employment as a skilled worker (Zeuner, 2009).

The aim of this study is to investigate the conditions and parameters under which social science students can experience individual skills development during the educational project under investigation. The focus here is on the effect of the didactic methods used on the development of individual competences and skills that emerge in the course of an educational project with students. Based on the capability approach, a higher education program that is methodologically based on social systems theory requires an orientation towards the individual and diverse needs of students. As a result, graduates can be educated who have far-reaching competences and thus develop a meta-competence that can go beyond the previous way of thinking about competence. Extensive freedom and decision-making power for students in the selection and processing of educational offers build the basis for this desired changes. In addition, sound knowledge of social systems paves the way for adequate support in current and upcoming challenges and the ability to recognise, initiate and successfully implement necessary transformation processes within social systems. Social systems theory provides a wealth of research findings on how social systems can be counselled and sustainably changed. Many methods and findings from this should at least be included in the curricula of social science degree programmes in order to enable education for change processes.

Didactically, a return to a broad range of educational offerings with interdisciplinary opportunities for specialisation could provide a solution approach. Taking into account the needs of students to be able to decide for themselves what educational content they want to learn, at what time and using what methods, the existing study programmes are often reaching their limits.

As a result of such corrections or improvements, young people would be educated who are able to influence social and societal conditions with regard to the needs of their individual and meaningful lives. Such an influence would emphasise people and their needs and wishes, and economic indicators would play a less important role in this type of university education.

REFERENCES

Bergmann, G., Daub, J. (2006). Systemisches Innovations- und Kompetenzmanagement, Grundlagen-Prozesse-Perspektiven, Wiesbaden: Gabler Verlag.

Bäuerle, L., Hantke, H., Schröder, L., Urban J. (2021). Wirtschaft neu Lernen – eine Einleitung in: Urban J., Schröder, L., Hantke, H, Bäuerle L. (Eds): Wirtschaft neu Lernen – Erfahrungen aus der pluralen, sozioökonomischen Hochschulbildung, Wiesbaden: Springer Verlag.

Ellrich, L. (1999). Verschriebene Fremdheit. Die Ethnographie kultureller Brüche bei Clifford Geertz und Stephen Greenblatt. Frankfurt, New York: Campus.

Faix, W., Kisgen, S., Schwinn, A., Windisch, L. (2021). Führung, Persönlichkeit und Bildung. Mit Führungskraft die Zukunft erfolgreich und nachhaltig gestalten. Wiesbaden: Springer Gabler.

Geertz, Clifford (1974). From the native's point of view: On the nature of anthropological understanding, Bulletin of the American Academy of Arts and Sciences, 28(1), pp. 26–45.

Hericks, N. (2018). Hochschulen im Spannungsfeld der Bologna-Reform, Erfolge und ungewollte Nebenfolgen aus interdisziplinärer Perspektive, Wiesbaden: Springer VS.

Krüger, D., Riemeier, T. (2014). Die qualitative Inhaltsanalyse – eine Methode zur Auswertung von Interviews. In:. Krüger D., Parchmann, I., Schecker, H. (Eds.): Methoden in der naturwissenschaftsdidaktischen Forschung. Berlin, Heidelberg: Springer-Verlag.

Löw-Beer, David (2023). Ökonomische Bildung für nachhaltige Entwicklung – Erkenntnisse und Forschungsperspektiven. In: Birke, F., Kaiser, T., Oberrauch, L. Remmele, B. (Eds.). Ökonomische Bildung als Allgemeinbildung. Wiesbaden: Springer VS.

Mayring, P. (2010). Qualitative Inhaltsanalyse – Grundlagen und Techniken, (11th ed.), Basel: Beltz.

Nussbaum, M. C. (2012). Gerechtigkeit oder das gute Leben. (Eds.): Pauer-Studer, Herlinde, Frankfurt am Main: Suhrkamp.

Otto, H.-U., Ziegler, H. (Eds.) (2010). Capabilities – Handlungsbefähigung und Verwirklichungschancen in der Erziehungswissenschaft, 2. Auflage, Wiesbaden, VS Verlag für Sozialwissenschaften.

Rump, J., Eilers, S. (2006). Managing Employability. In: J. Rump, T. Sattelberger & H. Fischer (Eds.): Employability Management (pp. 13–73), Wiesbaden: Gabler Verlag.

Von Schlippe Arist, Schweizer, Jochen (2013): Systemische Interventionen. (2th ed.). Göttingen: Vandenhoeck & Ruprecht. Göttingen.

Simon, F., B. (2014). Einführung in die (System-) Theorie der Beratung. Heidelberg: Carl-Auer Verlag.

Sen, A., K. (2000). Ökonomie für den Menschen, Wege zu Gerechtigkeit und Solidarität in der Marktwirtschaft, München: Hanser Verlag.

Sen, A., K. (2012). Die Idee der Gerechtigkeit, München, Dtv.

Zeuner, Christine (2009): Zur Bedeutung gesellschaftlicher Kompetenzen im Sinne eines kritischen bildungstheoretischen Ansatzes. In: Axel Bolder, Rolf Dobischat (Hrsg.): Eigen-Sinn und Widerstand. Wiesbaden: VS-Verlag, S. 260–281.