

### Research Motivation

In the international research on Vocational Education and Training (VET), there are an increasing number of studies on systems and structures of VET. However, research on actual planning and implementation of vocational education and training processes is very limited. The CodeVET project intends to conduct a comparative study, in order to investigate the competence-based approach in intended and implemented curricula of VET programs, in the field of business administration in Russia and China.

### Theoretical Background

The competence-based approach in VET, is at the centre of the CodeVET project research agenda. In recent years, competence-orientation has become one of the leading paradigms for VET worldwide, and its importance in the process of VET reformation is constantly growing. Therefore, in many countries it has become a central principle for construction, or modernisation, of the educational standards determining learning outcomes, as well as for the formulation of the methodological and didactical prescriptions for training and learning. Both Russia and China have introduced the competence approach as part of their VET reformation policies in the recent years. Despite its prevalence, the conceptualisation of competence-based (VET) education, and its foundation concept of competence, is vague. Consequently, its essential features and modalities of implementation in the VET systems remain heterogeneous (Baumeler 2019, Mulder 2017).

The embedding of the competence-based approach into the VET system, first of all takes place through curriculum. In the research, the concept of curriculum is often divided into three dimensions: intended curriculum (a series of formal documents that regulate learning processes), implemented curriculum (teaching-learning processes) and attained curriculum (learning outcomes of learners) (van den Akker 2003). Various scientific results show that between these three dimensions there can be significant discrepancies, which negatively affect the intended learning outcomes. An important goal of various reforms and modernisation activities in the field of vocational education and training, is to reduce these discrepancies. Therefore, in many countries the competence-based approach in curriculum formulation, teaching-learning processes and learning outcomes assessment, is seen as important in reducing these discrepancies.



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### Research Goals

The main objective of the project is to investigate whether and how, elements of competence orientation are established in both curricular design and implementation in the classroom in these countries. In addition, different proficiency and achievement levels of VET students, can be explained. A further objective, is to develop, and apply, a research methodology for analyzing and comparing curricula in international comparative VET research, in order to deepen the understanding of differences in VET teaching-learning processes in different countries.

### Research Questions

- How is the intended curriculum developed?
- What elements of competence orientation can be found in the intended curriculum?
- How are the intended curricula implemented by the teachers in their classes (implemented curricula)?
- Which characteristics of competence orientation can be observed in teaching practice?
- What distinctions and similarities among the countries studied, can be determined in relation to competence orientation in curricula?

### Research Design



### Research Methodology

To analyze the competence orientation in intended and implemented curricula, and possible discrepancies, a mix of data collection and analysis methods is applied. The criteria for the investigation of competence-orientation, are derived from an analysis of the relevant German, Russian, Chinese and English literature on competence-based education (CBE). In addition to the systematic literature review, different models of CBE are researched and compared. The ten principles of CBE, derived from the "Model for Comprehensive Competence-Based Vocational Education" of Sturing et al. (2011<sup>2</sup>), are taken as a basis for the creation of the criteria set for curriculum analysis. Before the model is applied for analysis of intended curricula in Russia and China, some validation and adaptation steps must take place. The usability of the model is evaluated through pilot testing on German curriculum documents. A further validation of the Model, is undertaken through comparison of the Model's principles and criteria of CBE, derived from the results of the analysis of national discourses. Additionally, interviews with national experts in the field of VET are conducted to evaluate the model, its applicability and transferability in the national context, as well as to offer recommendations for its adaptation. Thus, a system of analysis criteria for a curriculum document analysis, is specified. Subsequently, the results from both countries are compared. In the next phase, the reality of teaching practice is examined by using the method of structured class observation, in selected vocational schools in both countries. The previously developed criteria are embedded in the observation sheets. Afterwards, the teachers observed in class, are interviewed on the topic of their understanding and implementation of the competence orientation. The observations of lessons, include ten class hours at six different schools, in both countries (a total of at least 120 class hours). The interviews are conducted with at least two teachers per school (at least 24 interviews in total).

### Contact

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