



## Career Guidance in Schools from European and International Perspectives

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### Career Guidance as a School Development Task - Introducing a Study to Support School-Wide Career Guidance in Germany

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#### Abstract

**Context:** In Germany, schools are responsible for the overall organisation of career guidance (Kultusministerkonferenz [KMK], 2017). This means that schools must make decisions regarding content and didactics, as well as personnel and organization, to develop and implement a career guidance concept (Driesel-Lange et al., 2020). This raises the question of how schools can be supported in the complex task of realizing individual support within the concept. Klein et al. (2024) define seven areas of development (CG team, CG concept, school management, personnel, network/cooperation, infrastructure and implementation) that schools should focus on to further develop quality-led individualized career guidance. Subsequently, an initial working method, based on a digital question tool, is proposed. It is essentially founded on identifying possible next development goals based on a status quo (of the seven areas) and developing these in a structured manner.

**Approach:** The research and development project “DIGIBO Best! Developing and managing career guidance at school with digital tools” aims to create a data-based concept for further development of school-specific career guidance. Based on the design-based research approach (Euler, 2014), this concept is being developed in collaboration with 20 secondary schools. In addition to prepare a scientifically sound strategy for school practice, the assumptions and working methods inherent in the Klein et al. model (2024) will be reviewed, modified and consolidated. Interventions at the participating schools form the basis for the review and continuation of the approach. In terms of the individual school development of career guidance, the schools contribute their specific topics and concerns. The intervention begins with an initial workshop in which a SWOT analysis and the invented question tool are used to identify the seven areas named for career guidance in the model of Klein et al. (2024). At the same time, the strengths, weaknesses and development potential of the individual school are to be linked to this. This article aims to present the theoretical model of the question tool and the results of the first series of workshops in terms of the schools’ topics they wish to promote.

**Findings:** The first workshop phase with sixteen schools revealed their individuality. The development areas are characterized differently, and their importance is weighted variably. Schools link the evaluated development-critical areas with various topics that should be worked on next. There are also common themes across several schools that currently pose challenges for schools.



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**Conclusions:** It is clear from both the project design and the initial results that career guidance must be viewed at the individual school level. It is noticeable here that the academic discourse (career guidance as a school-wide task, necessity of individualisation) is reflected in school practice.

### **Keywords**

career guidance, school resources, development model, individual school, design-based research

## **1 Introduction**

The process of supporting and guiding of adolescents is the task of school-based career guidance in Germany (KMK, 2017). Schools need to make decisions about content, approach and personal organisation in order to enable and support young people individually to initiate and take responsibility for their career paths (Driesel-Lange et al., 2020). Ohlemann (2021) shows that schools vary in their success in achieving this. Klein et al. (2024) propose a model with seven developmentally critical areas. These must be taken into account in order to do justice to individual support needs and to create an approach for schools that enables differentiated, i.e. developmentally appropriate work with their young people (Driesel-Lange et al., 2011). The design of career guidance must therefore always be considered regarding the individual school and in the context of school-specific conditions and limited resources (Klein et al., 2024). The project to be presented asks how schools can be supported in creating and providing individualized career guidance in a quality-oriented, systematic way and based on the individual school's starting point.

After a brief theoretical and empirical overview and an introduction to the project, the article focuses on the school-specific topics identified in the first workshop phase that are to be addressed.

## **2 Theoretical basis and empirical findings**

In Germany, preparation for the transition from school to vocational training and/or higher education is linked to the goal of enabling all adolescents to develop their careers in a self-determined way and to shape them successfully in the long term (KMK, 2017). Career guidance can be considered a highly relevant educational task as it supports people's successful long-term participation in work and society. An international meta-analysis explains which activities ensure successful transitions in the long term and reduce subsequent unemployment (Covacevich et al., 2021). In Germany, the organisation of this area of responsibility is the binding responsibility of both the schools themselves and the employment agencies.

At the school's institutional level, teacher support and the social location of the school are predictors of career development and career competence (c.f. Klein et al., 2024). In particular, the study by Driesel-Lange et al. (2025) shows that, in addition to the effects of teacher support on career development, the general perception of teacher support varies from school to school. And further, against the background of school resources, schools implement career guidance programmes differently (Ohlemann, 2021). These aspects indicate that schools have different constellations for the provision of supporting career guidance. In addition to the empirical evidence on the importance of individual schools in the context of adolescents' career development, the international debate on career guidance is mostly focused on benchmarks and standards to be achieved. These are to be fulfilled by institutions, and at the same time a focus on individual schools becomes apparent (Collins & Barnes, 2017; Andrews & Hooley, 2022). Gravina and Camilleri (2021) present a framework which identifies four areas (career education, career guidance programme, roles and responsibilities, and career guidance from an overall school perspective) for schools to reflect on, evaluate and evolve for development

processes in the subject area. Blaich et al. (2022) also argue that school-based career guidance and the resulting support for young people "represents an independent area of school activity" (p. 15). To theoretically model career guidance as a school-specific task of quality development, an approach has been developed. It draws on various strands of discourse on career guidance, school development and implementation research. The model consists of seven key areas which need to be addressed to develop (Klein et al., 2024, see Figure 1). These areas are:

**Career Guidance Team (CG-Team):** The career guidance team is the group of people responsible for the operational business of career guidance who are necessary to manage the comprehensive tasks (Collins & Barnes, 2017). The core team includes the school management, while the extended team also includes external persons such as social pedagogues, careers advisors, employees of local businesses or companies and parent representatives. The tasks must be clearly defined and assigned to people (Bassot et al., 2014) who must be appropriately qualified for these tasks (Dreer, 2013).

**School Management:** School management has a key role in the individual school, as the head teacher (and her/his team) is linked to leadership, management and control (Rolff, 2023). It shapes the school culture and has overall responsibility for the school programme, the organisation of lessons, the timetable, development planning, the development of additional resources, staff selection and management, evaluation and self-management (Rahm, 2005). In the context of career guidance, it is responsible for visions of career guidance, the development of a strategy, quality assurance and the provision of resources (Driesel-Lange, 2020).

**Career Guidance Concept (CG-Concept):** The written concept of career guidance forms the agreed basis for educational action in the school. It describes the content, objectives, didactic organisation and responsibilities in a structured and consistent manner in the context of the school's mission statement along the lines of 'what, why, how, who, when and with what'.

**Implementation:** In addition to the concept, other strategies and correspondingly systematised materials are relevant for career guidance in schools. These include, for example, materials for working with parents and procedures for supporting pupils with specific needs. The operational status of the design of differentiated career guidance shows the extent to which it has been implemented.

**Staff:** Good cooperation within the entire teaching staff is important for the implementation of development projects such as individualised career guidance (Wissinger, 2014). This is rarely addressed and is particularly important in the context of the variety of tasks and the potential of interdisciplinary teaching for career guidance (Schudy, 2013). A joint commitment (Bassot et al., 2014) is needed for career guidance.

**Infrastructure:** Schools must have access to suitable resources and tools. For example, you not only need time corridors for career guidance, but also space for the team and for counselling students. The further development of career guidance requires the provision of evaluation tools and support in analysing and interpreting data. In addition, further financial resources may also be required to achieve specific goals.

**Network/Cooperation:** Cooperation between schools and, among others, the employment agency, companies, parents and other educational institutions is relevant in career guidance (Ohlemann, 2021). Career guidance teams in other (vocational) schools can also be recruited for networking work, as this is not only perceived positively, but also improves the coordination of career guidance programmes (Kaak et al., 2017). Network relationships are characterised by mutual commitment. It is necessary for all partners to state their interests and show a clear commitment to working together. Only in this way is it possible to divide up tasks against the background of the respective resources.

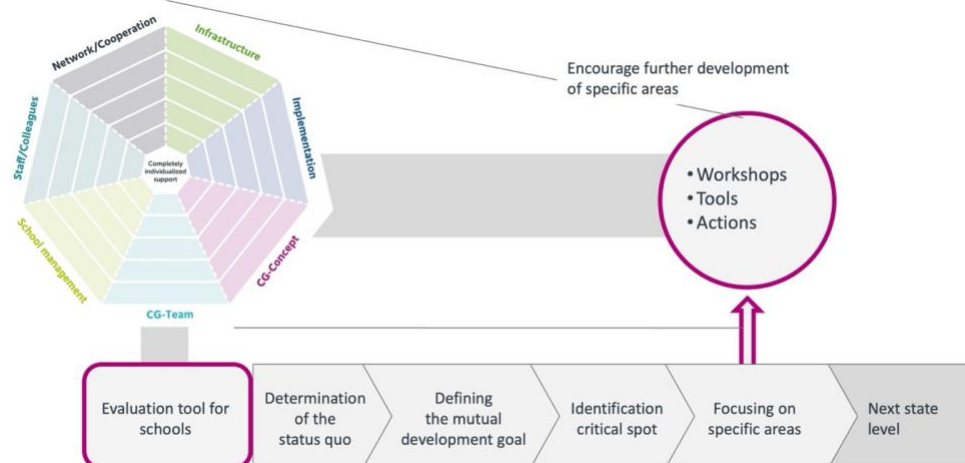
The model assumes that each school is different in these areas and therefore faces different next tasks within school career guidance (Klein et al., 2024).

### 3 Research question and objectives

The need for individualised support needs to be addressed both in terms of content and approach, and in terms of the personnel and organisational resources available for career guidance in schools. Consequently, the research question is how schools initially identify their organisational and personnel development needs, whether they can set appropriate development goals and focus their available resources accordingly (see Figure 1). In parallel, the second research question is concerned with the support needs that schools anticipate at different stages of the process.

**Figure 1**

Operation of the model



*Note.* Adapted from Klein et al., 2024, pp. 58.

Based on the need for systematic evaluation to initiate school development processes (Dederling, 2012), a corresponding digital tool will be invented in the three-year project "DIGIBO Best! Developing and managing career guidance at school with digital tools", supported by the German Federal Ministry of Education and Research. With the instrument, schools can use a theoretically founded basis for diagnosing their status quo to initiate and continuing the internal development of career guidance based on the findings in the seven critical areas. The overarching objective of the project is to provide a concept that outlines how schools should be accompanied in the data-driven evolvement of career guidance based on individually formulated goals. To achieve this objective a project, due to the design-based research approach (Euler, 2014), is being carried out. It will take place in cooperation with 22 schools (all types of secondary schools). Within the project the evaluation tool must be tested and revised as well as further school needs in the context of career guidance have to be identified in the light of schools' limited resources. To describe the needs in a differentiated manner for different types of schools, attention was paid to a balanced ratio of school-related criteria (socio-economic location, urban-rural ratio, size, school type) in the selection of schools.

### 4 Methodology of the intervention study

The project is grounded on the design-based research approach. We follow the generic model of McKenney & Reeves (2019), who suggest the phases of investigation/analysis, design/prototyping, evaluation/retrospection in a dual focus on theory and practice. This is because the development and testing of an innovative concept for overcoming practical challenges in school careers guidance can also lead to new scientific findings. These in turn flow into the revised concept. Problem solving and theory development therefore go hand in

hand (Euler, 2014). “Consequently, it commences with the search for and identification of significant problems in concrete practical contexts whose solutions demand an innovative approach. In terms of interventions, these solution approaches are not generally adopted but still need to be developed.” (Euler, 2014, p. 17). There is a certain research and development strategy in the context of design-based research. Moving through the three main phases in an iterative way develops the intervention for practice, refines it in a fourth step, and promotes theoretical understanding (McKenney & Reeves, 2019). Six key features can be attributed to this approach: Focused development and testing of an intervention, real educational context, iterative process, multiple research methods, practical expertise, theory development (Gess et al., 2014).

Against this background, a total of up to four 3-hours-workshops are planned over the three-year project period, so that each school runs through the intervention once every half term. The first workshop is structured as follows. After a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats), the tool is tested to discuss the next development themes based on the results. A first evaluation of the SWOT analyses shows that the need for individualised support is reflected and anticipated. Furthermore, the challenges and opportunities of career guidance are identified as a topic for cooperation between many internal and external school partners (Driesel-Lange et al., in press). The tool includes a questionnaire (73 items, 5-likert scale from ‘not at all’ to ‘completely’) and direct feedback (based on mean values). The feedback is given within the identified areas in beginners (mean values:  $x < 2.5$ ), advanced (mean values:  $2.5 < x \leq 3.5$ ), experts (mean values:  $x > 3.5$ ). Content-related considerations were used to determine the cut-off values. After a discussion, it is decided which topic will be addressed next. Thus, the first intervention focuses on getting to know the participating schools and their approaches and challenges in the field of career guidance in detail. From the second workshop on, in addition to both testing the evaluation tool and the intervention concept, further work will be carried out on the school-specific issues identified in the first workshop. From the third intervention onwards, three schools with similar development goals are invited together.

On an evaluative level, the quality of the operationalisation of the seven areas will be assessed and a needs analysis will be carried out based on the data collected during the intervention. Based on the theoretical-conceptual considerations of Klein et al. (2024), a questionnaire was created that operationalised the seven identified domains into 73 items. The schools receive area-specific feedback via mean values and are diagnosed as experts, advanced and beginners. The first intervention study served as a pilot test of the questionnaire and the diagnostic approach and to check the validity and reliability of the seven constructs. After the test, the schools were asked to assess the test and the area specific feedback in order to check the validity of the content. A qualitative analysis (Mayring, 2014) reveals the school-related needs in the context of career guidance, considering the entire workshop. The workshops were videotaped. A total of sixteen workshops have already taken place at schools. The remaining workshops are scheduled for fall 2024. We have submitted an application to the department's ethics committee. We received a statement with the judgement ‘ethically unobjectionable’.

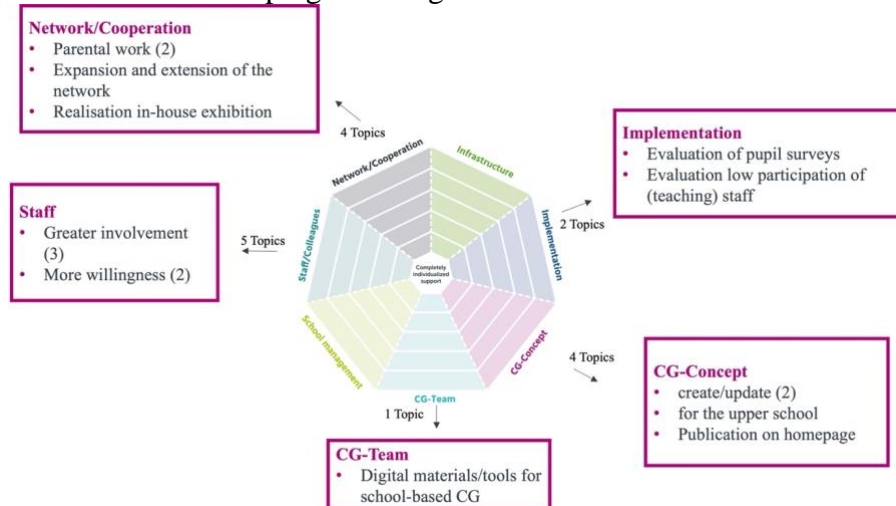
## **5 Results of the first school workshops**

The available data suggest that the operationalisation of the questionnaire results leads to ceiling effects. This shows that a diagnosis based on a domain-related mean value is not sufficient for a differentiated diagnosis. Regarding the needs analysis, different challenges and support needs become clear. Figure 2 summarises the identified needs that will be addressed in the second series of workshops in collaboration with the schools. This figure also shows the outcome of the first intervention. These themes have been summarised based on the SWOT analysis and the results of each school's work with the tool. The themes identified cover five of

the seven areas and focus on different facets of these areas. It is noticeable that the areas of school management and infrastructure were not prioritised as themes.

**Figure 2**

Identified next issues for developing careers guidance



## 6 Conclusion

Career guidance needs to be considered in the context of the individual school. It is becoming increasingly clear that schools face different challenges and opportunities in this regard (Ohlemann, 2021). Inevitably, from a theoretical-conceptual perspective, the question arises as to how schools can further develop high-quality, data-driven career guidance and what an accompanying approach might look like. In a dual focus on theory and practice, the implementation of the phases of investigation/analysis, design/prototyping, evaluation/retrospection (McKenney & Reeves, 2019) should lead to this accompanying approach. In a first step, a tool was developed to evaluate the initial school situation based on the identified critical development areas (Klein et al., 2024). In a second step, a first intervention study with the 22 project schools was designed and partially realised. The aim of this intervention study was to test the tool and to identify specific needs in the context of career guidance. From an institutional-practical perspective, schools individually interpret their opportunities and challenges in (further) development of career guidance. This results in different needs, which were translated differently into the next topics to be addressed. It is also noticeable that the areas of school management and infrastructure were excluded. A possible explanation for this could be the composition of the first workshop, which included (parts of) the school management. On the one hand, 'small' topics can be implemented directly by the school management and are therefore not 'sufficient' as the next development goal. On the other hand, in this hierarchical setting, it can be difficult to identify a 'next' big topic, so that other topics (e.g. teacher involvement) are considered first. This may also be a reason why infrastructure was not considered further. This is essentially a matter for the school management to create resources and/or reorganize. In the future, it should be considered whether school management should be addressed separately to consider the different hierarchical levels in the subject area. The first workshops made it clear that the academic discourse (e.g. individualised support for young people and career guidance as a school-wide topic) is reflected and anticipated in school practice. For example, the participating schools see an increased need to accompany and support young people in their career development in an individualised way. They anticipate that this will require restructuring, and that more or different resources will be needed. This could be discussed separately with the school management. From an empirical



perspective, data processing and presentation of results needs to be adapted. At this stage of development, the tool does not have a ranking within the areas due to their operationalisation of varying breadth and uses averages to categorise into beginner, advanced and expert. However, a hierarchy is emerging within the domains that the evaluation tool should pay attention to. These considerations will be taken into account in the next modified version of the tool, which will be tested again from the second series of workshops.

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