C. Krause, C. Nägele, R. Schröder, M. Rosalska, S. Romero-Rodriguez (Eds.), Career Guidance in Schools from European and international perspectives: Designing Transfer in Career Guidance Between Science and Practice.

Klein, J., Driesel-Lange, K., Staudinger, F., & Zenz, S. (2026). Career guidance as a school development task – a comparative perspective of vocational schools in Germany and Austria. In C. Krause, C. Nägele, R. Schröder, M. Rosalska, & S. Romero-Rodriguez (Eds.), *Career guidance in schools from European and international perspectives: Designing transfer in career guidance between science and practice* (pp. 148–160). Career Lead/OAPublishing. https://doi.org/10.21240/cleg/2026/clc/102

Career Guidance as a School Development Task – A Comparative Perspective of Vocational Schools in Germany and Austria

Klein, Jerusha
jerusha.klein@uni-muenster.de, University of Münster

Driesel-Lange, Katja
katja.driesel-lange@uni-muenster.de, University of Münster

Staudinger, Fabian
fabian.staudinger@ph-noe.ac.at, University of Teacher Education Lower Austria

Zenz, Sabine
sabine.Zenz@ph-noe.ac.at, University of Teacher Education Lower Austria

Abstract

Context: Career guidance is increasingly recognised as a core task of school development across Europe. In both Germany and Austria, efforts are underway to systematically embed career guidance into school structures, particularly within vocational and pre-vocational education. Despite differences in educational governance and institutional frameworks, both systems aim to empower young people to make informed and adaptable career choices. Against this backdrop, the DIGIBO Best! Model – developed in Germany – frames career guidance as a holistic school development process encompassing seven critical domains. This project represents the first attempt to transfer and adapt this model to the Austrian educational context.
Approach: The research employs a comparative design to analyse the structures, practices, and development needs of German vocational schools and Austrian pre-vocational schools. Using a Design-Based Research methodology, the study integrates qualitative and quantitative methods: a diagnostic questionnaire, SWOT analyses, and thematic workshops serve to assess the status quo and identify institutional development priorities. Empirical data from German schools form the basis for adapting tools and approaches to Austrian schools. The study also analyses the transferability of career guidance strategies across educational systems.
Findings: Initial findings from the DIGIBO Best! project in Germany reveal that schools interpret and prioritise career guidance development areas in highly individual ways. Schools tend to focus on internal needs such as staff involvement, conceptual development, and network

CC BY

Co-funded by the European Union

movetia

expansion. Content analysis of workshop data highlighted shared concerns (e.g., resource shortages, parental involvement) and school-type-specific challenges (e.g., networking in vocational schools). These findings inform the adaptation of instruments for Austrian pre-vocational schools and indicate the need for flexible, context-sensitive support strategies. Although early comparative observations suggest significant potential for mutual learning, they also emphasise the importance of adapting to specific systems.

Conclusions: Career guidance is not a one-size-fits-all solution. While cross-national models like DIGIBO Best! offer valuable frameworks, their success depends on careful contextualisation. The project demonstrates that school development in career guidance must account for institutional diversity and local conditions. The planned Austrian implementation phase will provide further evidence on the relevance and scalability of the model. Ultimately, the study aims to strengthen the strategic integration of career guidance within school development processes and promote cross-border exchange on effective educational practices.

Keywords

career guidance, school development, vocational education, comparative study

1 Introduction

Career guidance in schools has gained significant importance in education policy over recent years – both within the federal and national education systems of Germany and Austria. This development is reflected, among other things, in the increasing number of strategic documents and support systems that have been introduced at the national and state levels (e.g., Bundesministerium für Bildung [BMB] 2017; Ministerium für Schule und Bildung des Landes Nordrhein-Westfalen [MSB], 2020). Today, career guidance is no longer understood merely as an optional pedagogical activity or as the task of individual actors. Instead, it is increasingly conceived as a developmental task that must be structurally embedded across the entire school. This paper presents the conceptual and empirical foundation of a planned comparative research project, which aims to investigate how career guidance can be implemented and sustained as a whole-school task, and what contribution the DIGIBO Best! model, already successfully tested in Germany, can make to this process. The objective is to explore how the integration of career guidance and school development can be strengthened under different systemic and institutional conditions.

Vocational schools play a central role in this context. In North Rhine-Westphalia (NRW), for example, one third of students earn their general higher education entrance qualification (*Abitur*) through vocational education pathways (MSB & RuhrFutur gGmbH, 2022). At the same time, vocational schools face specific challenges: they combine different educational tracks (dual, full-time vocational, general education), work with highly heterogeneous student populations, and are often under significant resource pressure. It is precisely in this complexity that development-oriented and systematised career guidance can make a key contribution to the school's profile, coherence, and effectiveness.

2 Career Guidance as a Complex and Mandatory Task of Schools

Career guidance is structured differently across countries. Andrews and Hooley (2025) distinguish between two primary strategies: the external career service and the in-school guidance counsellor. In the latter model common in countries such as the United States or Norway a wide

range of responsibilities rests with staff integrated into school environment. By contrast, external career services, such as Wales's National Career Service, deliver personalised career guidance outside the school setting through dedicated programs. Some systems, such as Germany´s, combine both approaches. Regardless of these structural differences, career guidance is fundamentally embedded in the school context, albeit with varying degrees of institutional responsibility.

Internationally, the discourse on effective career guidance is closely tied to discussions on implementation strategies in schools. Benchmarks and quality standards –such as the Gatsby Benchmarks (Gatsby Charitable Foundation, 2024), checklists (Blaich et al., 2022), institutional focus areas (Gravina & Camilleri, 2021), and evaluative indicators (OECD, 2021) – frame much of this discourse. Covacevich et al. (2021) identify three critical indicators for impactful career guidance: exploring, experiencing and thinking about the future. These indicators address not only the conceptual design of guidance programs but also their organisational and personnel-related dimensions, emphasising young people´s career development goals.

Thus, career guidance is a comprehensive, school-wide task, not limited to isolated subjects or individual staff (Klein et al., 2024). The conceptual level ensures that guidance activities are individualised, aligning with students` diverse needs and backgrounds. The organisational and personnel dimensions, meanwhile, guarantee that all internal and external stakeholders contribute toward these goals. This complexity demands highly qualified professionals - both within and outside the school setting. Qualification standards vary widely by country (e.g. Schröder, 2020), impacting the structure and quality of career guidance provision.

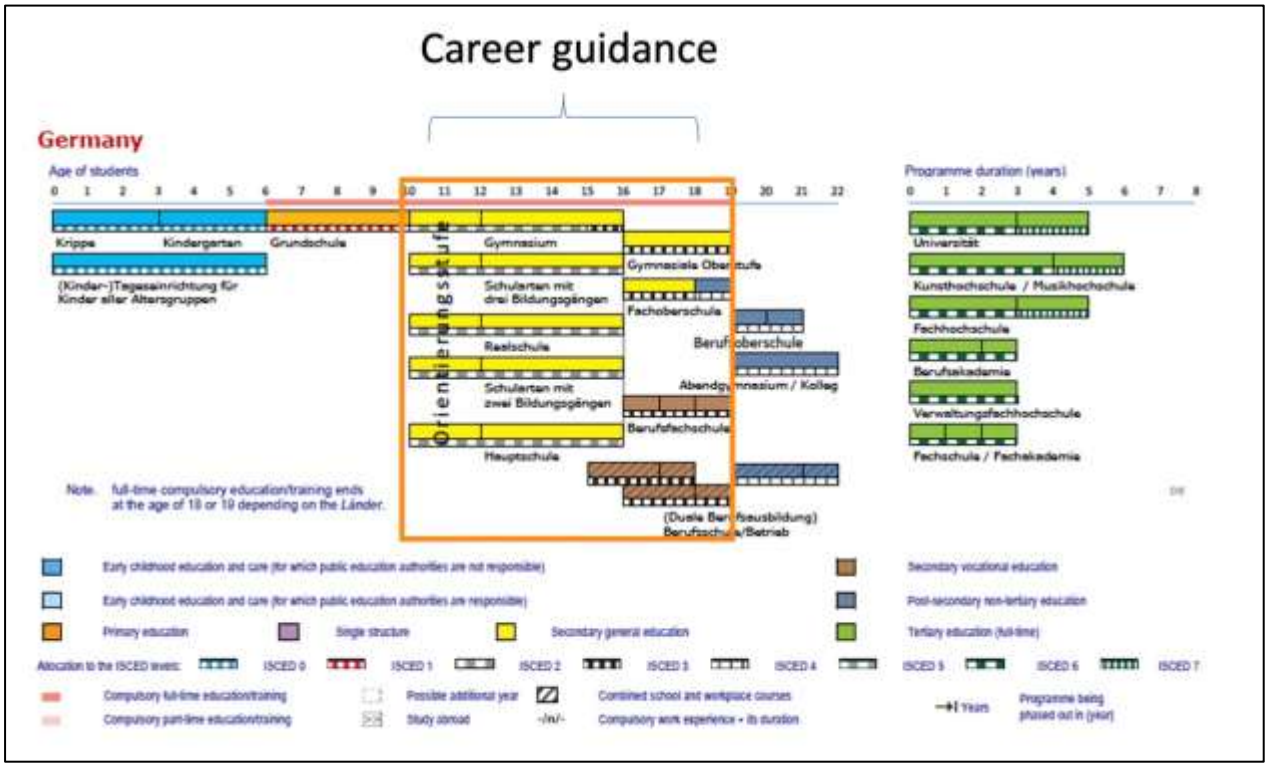
2.1 Career Guidance in Germany

In Germany, preparing students for the transition into vocational education or higher education is linked to the broader objective of enabling them to build independent, sustainable careers (KMK, 2017). Career guidance is jointly managed by schools and employment agencies, though the structure and degree of implementation vary by federal state (Schröder, 2020). Despite regional differences, career guidance is systematically integrated into secondary education nationwide (see Figure 1). Common elements, such as internships, are standard across all states (Sittig, 2023).

Regardless of the federal state-specific and in some cases school type-specific differences, career guidance is an integral part of secondary schools. Schools are thus tasked with reconciling national and regional policy requirements with the individual needs of their students. Evidence indicates that institutional factors such as teacher support (Driesel-Lange et al., 2025a), social context (Klein & Driesel-Lange, 2024), and school type (e.g. Driesel-Lange et al., 2025a) influence the development of career competencies. Furthermore, Covacevich et al. (2021) demonstrated that promoting the three aforementioned dimensions in schools leads to greater long-term career satisfaction, a lower likelihood of becoming NEET, and a higher likelihood of successful transitions. These findings highlight the necessity of school-specific approaches that align guidance efforts with students` diverse social and institutional environments.

Figure 1

An Overview of the German Education System, Including Career Guidance



Note. European Education and Culture Executive Agency 2023 (own adjustments)

Career guidance in vocational schools is especially complex due to their structural diversity. Vocational schools typically offer dual training programs, full-time vocational education, and pathways to higher education (see Figure 1, brown bars). They also include the so-called transition system (*Übergangsystem*), a pre-vocational program that supports youth with or without lower secondary certificates in acquiring qualifications and exploring career options. Roughly 250,000 students enter this system each year (Author:innengruppe Bildungsberichterstattung, 2024). Differentiated concepts of career guidance are still not discussed enough regarding vocational schools. In addition, the debate is mostly focused on the transition system (Nickolaus & Mokhonko, 2020) and less on the grammar school branch (Schuchart et al., 2016). Pupils at vocational schools are often expected to have already gained a clear understanding of the vocational field when choosing the type of school. An essential step in the context of the goals of career guidance has therefore already been taken. Accordingly, for example, young people at vocational schools in programs leading to a higher education entrance qualification must have a high level of career competence and express clearly profiled career interests. However, this is not the case (Prognos AG, 2022). Overall, vocational schools have a heterogeneous student body (Ohlemann & Driesel-Lange, 2019). Pupils at vocational schools who are enrolled in programs that prepare them for the higher education entrance qualification are somewhat more undecided than pupils in other programs (Prognos AG, 2022). It is therefore clear that different needs must be addressed through differentiated and individualised concepts of career guidance.

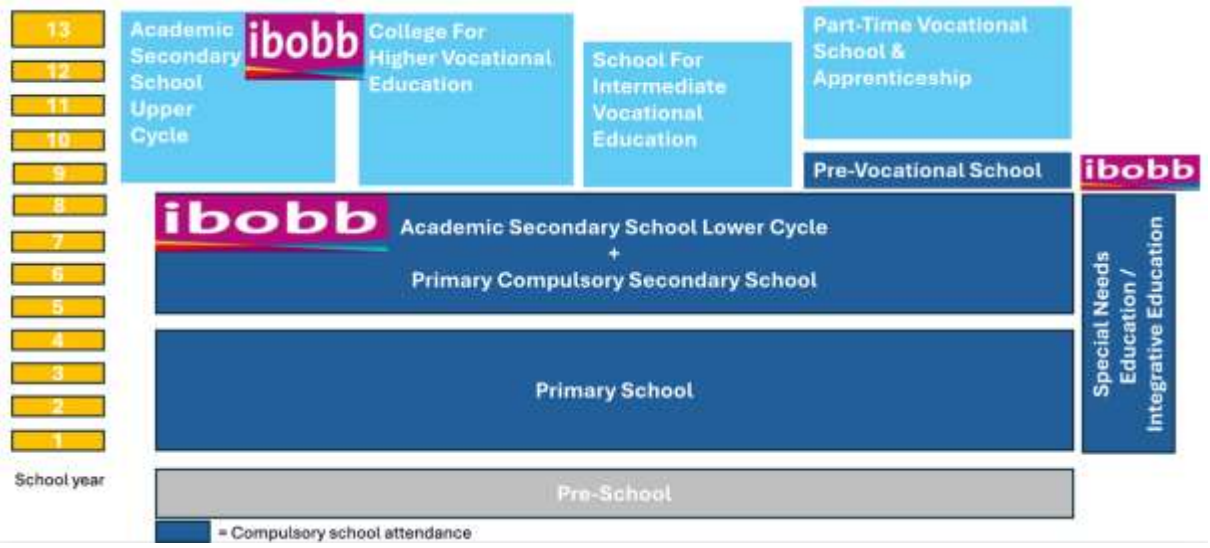
2.2 Career Guidance in Austria

In Austria, students as young as 14 after completing the eighth grade are faced with significant educational and career decisions. To support them, career guidance has been systematically integrated into the school system.

The Austrian model of information, guidance and orientation for education and career (ibobb) is moving away from factors such as gender, socioeconomic status and language background, encompassing classroom-based orientation, individual counselling, experiential learning and social support (Krötzl & Langenecker, 2023). Central to ibobb is the development of career management skills, including self-awareness, decision-making, goal-setting, information literacy, and adaptability (Krötzl, 2010). More recent frameworks (Fraundorfer et al., 2023) have expanded these into five dimensions: self-understanding, understanding of society, economy, and work; exploration of educational and occupational options; development of life goals; and management of transitions. Together, these competencies support lifelong, informed career planning.

As the following figure illustrates, ibobb, which is supported by partners such as the Chamber of Labour, the Economic Chamber, and the Public Employment Service (Cedefop, 2020) is a joint task of lower and upper secondary schools.

Figure 2
An Overview of the Austrian Education System, Including Career Guidance (ibobb)



Note. BMB, n.d. (own adjustments)

Austria´s three-tiered school-based ibobb model includes:

- Career education classes (grades 7 and 8),
- one-on-one counselling by student advisors, and
- psychological services (lower and upper secondary).

As of 2023/24, ibobb has also been implemented in primary education under the cross-curricular framework "Education, Career and Life Orientation" (BBLO) (Fritz & Friedwagner-

Evers, 2023; Luttenberger, 2023). In grades 7 - 8, career guidance coordinators teachers with specialised training plan and oversee school-wide career guidance initiatives.

Career guidance in pre-vocational schools (PTS) mirrors aspects of Germany´s transition system. The PTS is a one-year, level 9 school aimed at preparing students for apprenticeships. In 2022/23, 19.1 % of all 9th-grade students attended PTS (STATISTIK AUSTRIA, 2024). PTS connects students` interests and competencies to vocational pathways and supports career decision-making (Koliander & Pichler, 2019). Unlike the German model, PTS is a general education institution open to all students, regardless of performance. It serves both those with clear aspirations and those still uncertain about future plans (Brodsky et al., 2025).

Career guidance in PTS schools begins with an orientation phase, followed by internships and company visits. Students select from seven focus areas, ranging from metalwork to tourism. Alongside vocational preparation, students receive broad general education (e.g., civics, economics). After graduation, pathways include intermediate vocational schools, higher vocational colleges, apprenticeship, or academic secondary school (OeAD, 2025). Despite these options, the majority of PTS graduates enter the dual vocational training system, which highlights the core function of PTS as a bridge to apprenticeship training (STATISTIK AUSTRIA, 2023). Further, in upper secondary education, students in Austria can choose among academic secondary schools, vocational schools, and apprenticeships.

3 The Initial Project DIGIBO Best!

Building on the previously outlined research foundations, Klein et al. (2024) conceptualise career guidance as a comprehensive school development task. This model integrates key insights from school development, career guidance theory, and implementation research. Seven critical areas requiring systematic development in schools were identified: the career guidance concept, the career guidance team, school leadership, staff, implementation, networking and cooperation, and infrastructure. The model focuses on the goal of providing individual support to students, to which all areas should contribute. (Klein et al., 2024). The model acknowledges that each school organises career guidance differently, resulting in varying configurations across these areas. As such, the initial step involves assessing the school´s current position to identify entry points for development. Rather than tackling all areas simultaneously, schools are encouraged to address one development area at a time, enabling a manageable and sustainable process.

The DIGIBO Best! project operationalises this model by designing a practical support system for schools. This system includes a) a status quo assessment tool and b) thematic resources, guiding questions, and references to existing tools tailored to the seven core areas (Driesel-Lange & Klein, 2025; Driesel-Lange et al., 2025b). The methodological foundation of the project is Design-Based Research, implemented in cooperation with 22 secondary schools of various types, including vocational schools. Through iterative development cycles, the concept is continuously refined based on feedback from participating schools. Each school participates in workshops that begin with a standardised format; subsequent workshops are topic-specific, chosen by the schools themselves. This approach allows both for context-sensitive implementation and the continuous development of supporting materials (Driesel-Lange & Klein, 2025; Driesel-Lange et al., 2025b).

In the first workshop phase – now completed – a standardised process was applied. It began with a SWOT analysis, followed by a school self-assessment using a 73-item questionnaire, aligned with the seven development areas. This tool provides diagnostic feedback across three

levels: beginner, advanced, and expert. Based on the results, school teams select development goals and define the thematic focus of the next workshop accordingly.

Initial results reveal a strong interest among schools in further individualising their career guidance activities. This requires increased resources and the involvement of the entire school staff, as well as external partners (Driesel-Lange et al., 2025b). Topic preferences for upcoming workshops reflect this, with an emphasis on refining the guidance concept, enhancing staff involvement, and expanding school networks (Driesel-Lange & Klein, 2025).

Analysis of the video material revealed discussions on various topics and needs within the schools. Using a deductive-inductive approach, the results were categorised into seven predefined categories (Klein et al., 2024). These categories were supplemented by three focal points identified inductively. These three focal points are: evaluation, parent involvement, and resource shortage. Although students' competencies, which are associated with statements about pupils' abilities and skills, were widely discussed, they could not be determined as a separate category through induction. Instead, they represent a target dimension (see Table 1, Driesel-Lange et al., 2025c). The analysis highlights distinct differences across school types. For example, parent involvement and resource limitations were dominant concerns in general schools. Networking and cooperation were cited most often by vocational schools and special education schools but not mentioned at all in comprehensive schools.

Table 1
Discussed Further Development Needs by School Type (104 Responses in Total)

	Special education school (Förderschule)	Main school (Hauptschule)	Intermediate school (Realschule)	Comprehensive school (Gesamtschule)	Grammer school (Gymnasium)	Vocational school (Berufskolleg)	Total
CG-Team	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CG-Concept	16.7	15.4	14.3	18.2	16.0	17.6	16.3
School management	0.0	0.0	4.8	0.0	4.0	0.0	1.9
Staff	0.0	0.0	14.3	18.2	16.0	17.6	13.5
Implementation	16.7	7.7	9.5	13.6	12.0	5.9	10.6
Network / Cooperation	16.7	15.4	9.5	0.0	12.0	17.6	10.6
Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Parent involvement	16.7	23.1	19.0	18.2	8.0	11.8	15.4
Resource shortage	0.0	15.4	19.0	18.2	12.0	11.8	14.4
Evaluation	16.7	0.0	0.0	4.5	12.0	11.8	6.7
Student competencies	16.7	23.1	9.5	9.1	8.0	5.9	10.6
Total	100	100	100	100	100	100	100

Note. Driesel-Lange et al., 2025c (own adjustments)

A study on career guidance in North Rhine-Westphalia supports these findings and emphasises the efforts of vocational schools to collaborate. While two thirds of teachers in general

education agree that their school is well networked and can draw on external expertise, this figure rises to three quarters in vocational education. This may indicate that they recognise the need for further examination of the topic (Prognos AG, 2022).

4 Joint Research Design

4.1 Research Questions

This research project aims to conduct a comparative analysis between German vocational schools and Austrian pre-vocational schools, focusing specifically on their respective structures, practices, and development needs in the field of career guidance. The guiding research question is: *To what extent can career guidance practices be transferred between different national educational systems, specially between Germany and Austria?*

In addressing this overarching question, the project will explore the following core aspects:

- The conceptual frameworks, content, staffing, and organisational structures that shape the implementation of career guidance in both systems,
- The differences and similarities between the German and Austrian approaches, with particular emphasis on the institutional role of vocational and pre-vocational schools,
- The developmental needs of schools in each country and the types of support necessary to strengthen career guidance structures,
- The transferability of specific practices and tools, especially those related to the DIGIBO Best! Model, and their adaptability within different school development frameworks.

Through this comparative approach, the study aims to foster mutual learning between the two systems and to generate evidence-based insights that can inform the enhancement of career guidance practices across national contexts.

4.2 Methodological Approach

The project adopts a comparative and iterative design, structured in two phases, aligned with the principles of Design-Based Research and focused on institutional relevance and practical applicability.

Phase 1: Comparative Structuring and Instrument Adaptation

In the initial phase, a structured comparative analysis will be conducted to identify both shared characteristics and system-specific differences between the two school types. This involves deductively deriving relevant categories based on existing frameworks and empirical results from the German DIGIBO Best! project.

These categories will form the basis for a revised analytical framework tailored to the Austrian context. In parallel, a selection of suitable Austrian pre-vocational schools will be identified for participation in the project. The existing diagnostic questionnaire used successfully in the German context will be adapted to ensure contextual relevance and construct validity for Austrian schools. These preparatory steps will enable the collection of meaningful and comparable data.

Phase 2: Empirical Data Collection and Analysis

The second phase involves the implementation of the adapted instruments in the selected Austrian schools. This includes the use of the revised status quo assessment tool to evaluate the current state of career guidance in pre-vocational settings. The participating schools will then engage in guided workshops, following the DIGIBO Best! methodology.

The data collected will undergo qualitative content analysis, informed by the previously developed categories. These analyses will consist of:

A SWOT analysis to examine the strengths, weaknesses, opportunities, and threats linked to institutional career guidance efforts,

A status quo analysis, providing a comprehensive picture of existing practices, personnel structures, and coordination mechanisms,

The identification of development priorities, highlighting areas requiring targeted support and improvement.

The goal of this empirical phase is to generate in-depth insights into the effectiveness, constraints, and contextual dynamics of career guidance in Austrian pre-vocational schools, and to assess the transferability of development tools such as DIGIBO Best!.

By building a robust empirical and conceptual foundation, this research contributes to the cross-national discourse on school development and career guidance, offering recommendations for evidence-based policy design and the further development of support frameworks in vocational education systems.

5 Discussion: Career Guidance as a School Development Task in Comparative Perspective

Career guidance has long been recognised internationally as a key component of school development. Both Austria and Germany are progressively developing and integrating models to establish career guidance as a structurally embedded responsibility within their respective educational systems. While systemic differences remain particularly in governance structures, school typologies, and vocational training pathways the overarching objective of career guidance is aligned across contexts: to empower young people to make informed, reflective, and adaptable career decisions throughout their lives.

The present study marks one of the first attempts to transfer an existing, theoretically and empirically grounded school development framework DIGIBO Best! into a new national and institutional context. As such, this research represents a pilot effort, guided by an initial conceptual framework and informed by methodological and practical insights from the German vocational setting. The preliminary character of the project requires cautious interpretation, yet it also offers a unique opportunity to critically assess how national models of career guidance can be adapted across borders.

At face value, the selected types vocational schools in Germany and pre-vocational school in Austria appear well-suited for comparison. Both serve similar target groups, focus on transitions from school to work or further education, and combine general education with career guidance. Their shared mission to support educational and career guidance makes them promising candidates for joint analysis.

However, early insights from the DIGIBO Best! project caution against assumptions of institutional homogeneity. Findings from Germany illustrate that schools interpret challenges and opportunities through individual lenses, shaped by local conditions, internal structures, and specific school cultures. Even when provided with the same analytical framework, schools prioritised different development areas, reflecting their own strategic orientations and contextual

needs. These observations underscore the importance of recognizing school-specific dynamics in the process of educational change.

A key insight from the German context is that career guidance is deeply embedded in school development processes, and that effective implementation requires a deliberate and individualised approach. This includes reflective practice, stakeholder engagement, and coordinated action across organisational levels. Whether such findings are transferable to the Austrian context particularly to the PTS sector remains an empirical question. The project operates at the micro level, i.e. at the level of individual schools. However, it would be possible to expand the scope of the study to include systemic contexts at the meso and macro levels (Fend, 2008). This could enrich the cross-country comparison. The forthcoming phases of this research will test the relevance and adaptability of the DIGIBO Best! model within Austria´s specific institutional conditions.

The central question guiding this comparative endeavour thus remains: To what extent can career guidance practices be transferred across educational systems and what can we learn from one another through such cross-national engagement?

By analysing both convergence and divergence in implementation strategies, this project aims to foster mutual learning, identify context-sensitive development pathways, and contribute to a shared understanding of career guidance as a strategic pillar of school development.

References

Andrews, D., & Hooley, T. (2025). *The careers leader handbook* (3rd ed.). Trotman.

Autor:innengruppe Bildungsberichterstattung. (2024). *Bildung in Deutschland 2024: Ein indikatorengestützter Bericht mit einer Analyse zur beruflichen Bildung* [Education in Germany 2024: An indicator-based report with an analysis of vocational education]. wbv.

Blaich, I., Grüneberg, T., Knickrehm, B., & Thiel, R. (2022). *Verbesserung der Qualität der Beruflichen Orientierung an Schulen – Ein Handbuch* [Enhancing the quality of career guidance in secondary schools – A handbook] (German revision of *Enhancing the quality of career guidance in secondary schools – A Handbook* by R. G. Sultana). dvb. https://dvb-fachverband.de/wp-content/uploads/2022/05/Sultana-Handbuch_Deutsche_Ausgabe_Preprint_2022_04_25.pdf

Brodsky, A., Heinrichs, K., Wuttke, E., Seeber, S., Seifrid, J., & Niederfriniger, J. (2025). Berufsorientierung in Bildungsgängen der Ausbildungsvorbereitung in Deutschland und Österreich [Vocational orientation in training preparation programs in Germany and Austria]. *bwp@ Profil, 11*, 1–27. https://www.bwpat.de/profil11_ostendorf/brodsky_etal_profil11.pdf

Bundesministerium für Bildung. (2017). *Grunderlass für Berufsorientierungskoordination* [Basic edict for coordinating career guidance] (Rundschreiben Nr. 30/2017).

Bundesministerium für Bildung. (n.d.). *Bildungs- und Berufsorientierung* [Educational and career orientation]. https://www.bmb.gv.at/Themen/schule/schulpraxis/ba/bo.html

Cedefop. (2020). *Inventory of lifelong guidance systems and practices - Austria*. https://www.cedefop.europa.eu/en/country-reports/inventory-lifelong-guidance-systems-and-practices-austria

Covacevich, C., Mann, A., Santos, C., & Champaud, J. (2021). *Indicators of teenage career readiness: An analysis of longitudinal data from eight countries* (OECD Education Working Papers, No. 258). OECD Publishing.

Driesel-Lange, K., & Klein, J. (2025). Career guidance as a school development task - Introducing a study to support school-wide career guidance in Germany. In R. Schröder, C. Nägele, M. Rosalska, A. Wawrzonek, & S. Romero-Rodríguez (Eds.), *Career guidance in schools from European and international perspectives: Rethinking career guidance in times of uncertainty and transformation* (pp. 11–18). Career Lead. https://doi.org/10.5281/zenodo.14944145

Driesel-Lange, K., Klein, J., Ohlemann, S., & Weyland, U. (2025a). Can teachers support adolescents' development of career management skills? In A. Chant, J. Katsarov, J. Pouyaud, & L. Sovet

(Eds.), *Building career management skills*. Network for Innovation in Career Guidance & Counselling in Europe. https://zenodo.org/records/14753445

Driesel-Lange, K., Klein, J., Richter, I., Nienkötter, M., Häming, S., & Weyland, U. (2025b). Berufliche Orientierung aus institutioneller Perspektive – ein Konzept zur Begleitung individueller Schulentwicklung [Career guidance from an institutional perspective - a concept to accompany individual school development]. *Erziehung und Unterricht, 2025*(3-4), 268–275.

Driesel-Lange, K., Klein, J., Richter, I., Nienkötter, M., Häming, S., & Weyland, U. (2025c). *Bedarfe der Schulen: Interner Sachbericht im Projekt DIGIBO Best* [School needs: Internal report for the DIGIBO Best! Project]. Münster.

European Education and Culture Executive Agency. (2023). *The structure of the European education systems 2023/2024*. Publications Office of the European Union. https://doi.org/10.2797/721239

Fend, H. (2008). *Schule gestalten: Systemsteuerung, Schulentwicklung und Unterrichtsqualität* [Shaping schools: System control, school development and teaching quality]. VS Verlag für Sozialwissenschaften.

Fraundorfer, A., Langenecker, E., & Fritz, S. (2023). Kompetenzen für die Bildungs- und Berufswahl – Empowerment zur Orientierung und Entscheidungsfindung [Skills for educational and career choices - empowerment for orientation and decision-making]. In Pädagogische Hochschule Steiermark (Ed.), *Empowerment für die Bildungs-, Berufs- und Lebensorientierung* (pp. 50–60). https://portal.ibobb.at/fileadmin/Berufsorientierung_und_Bildung/Studien/Handreichung_I-BOBB.pdf

Fritz, S., & Friedwagner-Evers, U. (2023). Der neue BBO-Lehrplan und das übergreifende Thema Bildungs-, Berufs- und Lebensorientierung [The new BBO-curriculum and the overarching theme of education, career and life orientation]. In Pädagogische Hochschule Steiermark (Ed.), *Empowerment für die Bildungs-, Berufs- und Lebensorientierung* (pp. 67–73). https://portal.ibobb.at/fileadmin/Berufsorientierung_und_Bildung/Studien/Handreichung_IBOBB.pdf

Gatsby Charitable Foundation. (2024). *Good career guidance: The next 10 years*.

Gravina, D., & Camilleri, S. (2021). *Career learning and development – A framework for schools*. The Malta Euroguidance Centre.

Klein, J., & Driesel-Lange, K. (2024). Jugendliche an Schulen in herausfordernder Lage: Gewinner oder Verlierer Beruflicher Orientierung? [Adolescents at schools in challenging locations: Winners or losers of career guidance?]. *Zeitschrift für Berufs- und Wirtschaftspädagogik, 120*(4), 663–687. https://doi.org/10.25162/zbw-2024-0026

Klein, J., Driesel-Lange, K., Weyland, U., & Ohlemann, S. (2024). Weiterentwicklung und Stärkung schulischer Berufsorientierung: Ein holistisches Entwicklungsmodell zur Förderung individueller Berufswahlkompetenz in Schulen [Developing and improving career guidance programs in schools: A holistic model to support individual growth of career management skills]. *Zeitschrift für Berufs- und Wirtschaftspädagogik, 120*(1), 42–62. https://doi.org/10.25162/zbw-2024-0002

Koliander, B., & Pichler, M. (2019). Berufsorientierung an Schulen in Österreich [Career orientation at schools in Austria]. *Plus Lucis, 4*, 13–18. https://www.pluslucis.org/ZeitschriftenArchiv/2019-4_PL.pdf

Krötzl, G. (2010). „Career Management Skills" – ein Kernelement der Strategien zur Lifelong Guidance ["Career management skills" - a core element of lifelong guidance strategies]. *Magazin erwachsenenbildung.at: Das Fachmedium für Forschung, Praxis und Diskurs, 9*, 67–76. https://erwachsenenbildung.at/magazin/10-09/meb10-9.pdf

Krötzl, G., & Langenecker, E. (2023). Information, Beratung und Orientierung für Bildung und Beruf umfassend denken: Das Modell ibobb [A comprehensive approach to information, guidance, and orientation for education and career: The ibobb model]. In Pädagogische Hochschule Steiermark (Ed.), *Empowerment für die Bildungs-, Berufs- und Lebensorientierung* (pp. 19–29). https://portal.ibobb.at/fileadmin/Berufsorientierung_und_Bildung/Studien/Handreichung_IBOBB.pdf

Kultusministerkonferenz. (2017). *Empfehlung zur Beruflichen Orientierung an Schulen* [Recommendation for career guidance in schools] (Beschluss der Kultusministerkonferenz vom 07.12.2017).

Luttenberger, S. (2023). Entwicklung von beruflichen Interessen und der Stellenwert der Bildungs- und Berufsorientierung in der Primarstufe [Development of career interests and the importance of educational and career guidance at primary level]. In Pädagogische Hochschule Steiermark (Ed.),

Empowerment für die Bildungs-, Berufs- und Lebensorientierung (pp. 74–77). https://portal.i-bobb.at/fileadmin/Berufsorientierung_und_Bildung/Studien/Handreichung_IBOBB.pdf

Ministerium für Schule und Bildung des Landes Nordrhein-Westfalen (MSB). (2020). *Berufliche Orientierung (Ausbildungs- und Studienorientierung)* [Career guidance (vocational training and study guidance)] (RdErl. d. Ministeriums für Schule und Bildung v. 21.04.2020, ABl. NRW. 05/2020).

Ministerium für Schule und Bildung des Landes Nordrhein-Westfalen (MSB) & RuhrFutur gGmbH. (2022). *Die Rolle des Berufskollegs im nordrhein-westfälischen Bildungssystem: Leistungspotenziale, Herausforderungen und Ansätze zur Weiterentwicklung* [The role of vocational schools in the North Rhine-Westphalian education system: Performance potential, challenges and approaches to further development].

Nickolaus, R., & Mokhonko, S. (2020). Berufsorientierung in berufsbildenden Schulen: Bedarfe, Maßnahmen und Effekte [Career guidance in vocational schools: Needs, measures and effects]. In T. Brüggemann & S. Rahn (Eds.), *Berufsorientierung: Ein Lehr- und Arbeitsbuch* (pp. 326–336). Waxmann.

OeAD. (2025). *Das österreichische Bildungssystem* [The Austrian education system]. https://bildungssystem.oead.at/en/

Ohlemann, S., & Driesel-Lange, K. (2019). Determining career competence types in vocational schools as a prerequisite for successful transitions: A latent profile analysis. *Studia Paedagogica, 24*(2), 33–57.

Prognos AG. (2022). *Evaluation der Landesinitiative „Kein Abschluss ohne Anschluss – Übergang Schule-Beruf in Nordrhein-Westfalen“* [Evaluation of the state initiative – No degree without a transition - transition from school to work in North Rhine-Westphalia].

Schröder, R. (2020). Rahmenkonzepte zur Berufsorientierung in Deutschland, Österreich und der Schweiz [Framework concepts for career education in Germany, Austria and Switzerland]. In T. Brüggemann & S. Rahn (Eds.), *Berufsorientierung: Ein Lehr- und Arbeitsbuch* [Career guidance: A textbook and workbook] (2nd ed., pp. 109–117). Waxmann.

Schuchart, C., Keßler, C., Scheidt, B., & Buchwald, P. (2016). Veränderung der Studienorientierung im Verlauf der Sekundarstufe II unter Männern und Frauen und ihre individuellen und kontextuellen Gründe [Changes in study orientation in the course of upper secondary school among men and women and their individual and contextual reasons]. *bwp@ Spezial, 12*, 1–28. http://www.bwpat.de/spezial12/schuchart_etal_bwpat_spezial12.pdf

Sittig, M. (2023). *Förderung von heterogenen Zielgruppen im Übergang Schule – Beruf: Eine empirische Untersuchung von Landesstrategien und regionalen Förderkonzepten der Berufliche Orientierung* [Supporting heterogeneous target groups in the transition from school to work: An empirical study of state strategies and regional career guidance support concepts]. Bielefeld University. https://doi.org/10.25656/01:28689

Statistik Austria. (2023). *Bildung in Zahlen 2021/22 – Tabellenband* [Education in figures 2021/22 - volume of tables]. https://www.statistik.at/fileadmin/user_upload/BiZ-2021-22_Tabellenband.pdf

Statistik Austria. (2024). *Bildung in Zahlen 2022/23 – Schlüsselindikatoren und Analysen* [Education in figures 2022/23 - key indicators and analyses]. https://www.statistik.at/fileadmin/user_upload/BiZ-2022-23_Schluesselindikatoren.pdf

Biographical notes

Jerusha Klein is a research associate at the Institute for Educational Science, Career Guidance Research Group (University of Münster, Germany). Her research focuses on risk factors for career development, career guidance in school and evaluation of career activities.

Dr Katja Driesel-Lange is a professor for career guidance at the University of Münster, Institute for Educational Science. Her research foci include adolescents` career development, career guidance as a task of school development and professionalization of teachers.

Fabian Staudinger is a lecturer and researcher at the University College of Teacher Education Lower Austria. He serves as the course director for several career guidance courses, focusing on career education and guidance in schools.

Dr Sabine Zenz, MEd is a professor Mag. at the University of Teacher Education in Lower Austria. She is the head of Centre Career Change and Professions and the head of Centre for Gender and Diversity competence. Her research foci are „Career education and guidance in schools“ and „Second career teacher“.