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# Sustainable labor migration through vocational education and training providers? Conditions of access and accessibility in the public-private (continuing) VET sector

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**Context:** Due to the shortage of skilled workers, Germany is already recruiting skilled workers from abroad, especially from countries outside the EU. The Skilled Labour Immigration Act (FEG), introduced in 2020 and amended in 2023, regulates the migration of skilled workers. In addition to legally regulated access, other measures also play a role in ensuring that skilled migrants remain in Germany. For this reason, the article examines the questions of how vocational education and training (VET) providers initiate the integration of migrants, which structural elements target capabilities, and how they perceive their own potential.

**Methods:** As part of an EU-funded project, a document analysis and problem-centered interviews were conducted. A total of 40 stakeholders from different status groups in Germany (e.g., employers, VET institutions) from various sectors were interviewed. Using an analytical framework based on Heckmann's integration theory and Nussbaum's capability approach, the interviews were analyzed with regard to the research questions focussing on four specific capabilities.

**Findings:** The analysis revealed that most accessibility measures focused on the structural dimension of integration. To promote social participation, a greater social inclusion is required. All identified measures also showed potential for the four specific capabilities, but only to a limited extent. VET providers are aware of the importance of labor migration and the associated responsibilities, but more general initiative is needed, as much of the work has so far been based on individual commitment.

**Conclusion:** A holistic view of the integration process of migrants requires the inclusion of these individuals' perspectives. It also became clear that the conversion factors of migrants play an essential role in transforming capabilities into functionings, so that the analyzed promotion of capabilities merely reflects potential and is determined by the individual resources of migrants.

## KEYWORDS

capabilities, labor migration, skilled labor immigration act, sustainable integration, vocational education and training

## 1 Problem statement and research questions

Germany is facing a marked shortage of skilled workers in many sectors, particularly in healthcare, and needs to deal with the related challenges. The reasons for the shortage of skilled workers lie in macro trends like decarbonization, digitalization, and demographic change (Brücker et al., 2024; Burkert et al., 2024; Hutter and Weber, 2023). To counteract the shortage of skilled workers, Germany needs a net immigration of 400,000 people per year (Fuchs et al., 2021) in order not only to maintain population stability but also to generate growth. By way of comparison, the United Kingdom needs around 340,000 people per year (Office for National Statistics [ONS], 2025), while Norway only needs a net immigration of around 13,000 people annually (Thomas and Tømmerås, 2022).

### 1.1 Recent strategies to overcome skilled labor shortage

Addressing the shortage of skilled workers, Germany applies a certain number of strategies, e.g., the labor participation of the so-called 'silent reserve', further education and career change of available labor and the labor market integration of refugees. Another strategy is the recruitment of (skilled) workers from EU (such as Western Balkans), but increasingly from non-EU countries (Hutter and Weber, 2023). Framed by the concept of Global Skills Partnerships (Clemens, 2015), the recruiting of skilled workers from outside the EU is piloted. For instance, the THAMM and THAMM plus projects, conducted by the German Society for International Cooperation (GIZ), aim to support regular labor migration and mobility between certain regions (THAMM plus: North Africa with Egypt, Morocco and Tunisia) and Germany (German Society for International Cooperation [GIZ], 2025). An example for a project with a sector-specific approach is Triple-Win. Again, the GIZ and the Federal Employment Agency are responsible with the Central Foreign and Specialist Placement Agency (ZAV) as a different department. Triple-Win aims at recruiting skilled workers from abroad on a long-term basis, focusing on Vietnam, the Philippines, India, Indonesia and Tunisia (Federal Employment Agency, 2025).

These projects and related programs already show that measures to address the shortage of skilled workers in Germany have already been initiated. However, when it comes to labor migration, the question remains as to how the long-term retention of migrant skilled workers can be ensured and promoted. This is where sustainable integration becomes important (Schmidt and Müller, 2020). Sustainable integration not only encompasses the temporal aspect of long-term integration, but also includes much more: It refers to integration tasks as mandatory tasks of local authorities to strengthen structural resilience and social participation and inclusion (Fratzcher and Zinn, 2025; Expert Council for Integration and Migration [SVR], 2025). Sustainable integration is therefore one aspect of the Sustainable Development Goals (SDG, United Nations, 2025). Vocational and social integration measures are necessary to recruit and retain skilled migrant workers in the long term (Organisation for Economic Co-operation and Development [OECD], 2019).

### 1.2 Challenge of retaining skilled labor

One problematic aspect of successful retention of skilled labor is the extent to which a person can make targeted and well-informed decisions on migration pathways. This covers at least two dimensions: (1) precise, *transparent information and guaranteed conditions* enable informed decisions and reduce individual risk and (2) the expected *extent of recognition* has to be clear early in the process so that no expectations are disappointed (Melde and Benz, 2014).

A long-term development reaching a certain maturity of assuring (1) *transparent information and guaranteed conditions* can be found in the care sector, which has been affected by skills shortages for the longest time. As a state-level regulated profession, practitioners have a wealth of experience in quality management. It is therefore not surprising that a quality seal ('Faire Anwerbung Pflege Deutschland' [Fair Recruitment in Care Germany]) has already been developed for this sector to regulate fair recruitment (Fair Recruitment in Care Germany, 2025). The objectives of the quality association include creating transparency throughout the entire migration process, protecting nursing professionals and providing guidance on the selection of agencies. This transparency enables potential care migrants to make decisions at a solid ground of expectations. On the other hand, the companies are forced to disclose their work conditions and establish responsible recruitment strategies. The seal is an example of how to frame access and accessibility in terms of labor. However, the application of the label is not binding and still remains sector-specific.

The (2) *extent to which a recognition is possible* depends on the profession, the sector and the availability of the applicant's necessary certificates. Full recognition is only possible when the qualification of an applicant fits the job description in Germany. In some professions, a partial recognition is possible and the applicant has to retrain the missing aspects. Studies show that most people have had a negative experience with the recognition process, e.g., because of long waiting times (Leininger et al., 2025). Working in Germany, moreover, requires certain language levels, e.g., level B2 to start an apprenticeship or C1 to enter higher education (Recognition in Germany, 2025a). From German perspective, this requires further education programs and offers. It could even lead to increasing vocational education and training (VET) within the target country instead of recognizing education achievements from the country of origin. Moreover, learning is not only required in relation to labor issues, but also or even more for the ability to socially participate. The Federal Ministry of Research, Technology and Space (BMFTR) identifies education as the key to social participation, social advancement, progress and personal freedom (Federal Ministry of Research, Technology and Space [BMFTR], 2025), summarized as an essential aspect of integration (Lechner et al., 2023).

### 1.3 VET and CVET system in Germany

To better understand the complex problem of recognition, education and work in Germany, some background information about the VET and continuing vocational education and training (CVET) system is needed. This section provides a very brief overview of the structure of the German VET system and lines out the role and

meaning of the so-called education economy particularly in the context of migration.

The VET in Germany takes place at various learning venues, such as vocational schools, companies and other educational institutions (Eckert et al., 2022). There are two main types of VET: Dual training and school-based training (Eckelt, 2022; Klemm, 2022). VET is regulated by the Vocational Training Act [Berufsbildungsgesetz, BBiG], which has provided a framework for dual training since 1969 and stabilizes the German social partnership (Weitz and Ludwig-Mayerhofer, 2024). Dual training (non-regulated occupations) combines on-the-job practice with school-based theory and forms the central element of VET in Germany. It is highly company-based and state-regulated, with the state setting the principles of training and the federal states regulating vocational schools. Apprentices usually spend 3–4 days a week in the company and 1–2 days in the vocational school. Around 500,000 people complete this training every year (Weitz and Ludwig-Mayerhofer, 2024). In contrast, school-based training takes place at full-time school-based VET institutions and is particularly common in the health, education and social services sector (GES occupations, regulated occupations). It is a separate part of VET and is located at upper secondary level rather than at tertiary level. In addition, this area is regulated by different legal regulations depending on the respective profession (Wittig, 2022). In detail, this form of apprenticeship distinguishes between training regulated by federal law and those regulated by state law (Zöller, 2015). Training regulated by federal law includes healthcare profession such as geriatric care. Training occupations such as educators are subject to the respective federal states and are therefore regulated by state law (Zöller, 2015). Every year, more than 200,000 young people choose this path (Weitz and Ludwig-Mayerhofer, 2024).

Within CVET, a distinction must be made between general adult education and vocational and in-company CVET (Breitschwerdt and Egetenmeyer, 2022). General adult education includes for instance political and cultural education. Vocational education in this regard comprises internal or external training or qualification measures, either at company or individual level (Breitschwerdt and Egetenmeyer, 2022). In Germany, there are more than 17,000 CVET institutions with different market positions (private or public): Private VET providers (commercial, non-profit), company-integrated training institutions or departments, vocational schools, adult education centers, (technical) colleges, industry-related institutions (e.g., chambers), state-driven institutions or those with relation to a special interest group, such as church, party or trade union (Breitschwerdt and Egetenmeyer, 2022). The public institutions are carried by state or federal countries. This covers especially vocational schools. The CVET sector, in opposite, must mainly finance themselves. This leads to a high competitiveness and the need to apply for funding or bind a certain number of customers. State-run funding lines often give the context for market adaptations and provided education offers. At this point, it becomes important, how the state discusses migration and how integration is facilitated or supported by public discourse and funding. Still, the efforts and measures are not efficiently monitored or coordinated. By way of comparison, the Netherlands integrates migrants through state-organized programs (e.g., Government of the Netherlands, 2022) focusing on language, work and digitalization, with a strong emphasis on the labor market (Organisation for Economic Co-operation and Development [OECD], 2025). Moreover, huge engagement came from the integration of forced migrants, which

now goes in parallel with the integration of labor migrants. There is potential in mutual learning from experiences. For example, the Network Companies Integrate Refugees [Netzwerk Unternehmen integrieren Flüchtlinge]<sup>1</sup> provides both high connectivity to labor market, CVET sector and volunteering of labor market actors in integration activities.

## 1.4 Access, accessibility and capability approach

As described above, *access* particularly to work and education has an important role in the integration contexts. Access to education and work (Kleinert and Jacob, 2024) follows a multi-level approach. At the macro level, it encompasses formal criteria such as recognition of qualifications. The meso level concerns institutional aspects like intercultural orientations, while the micro level addresses individual factors such as vulnerability. These levels overlap with dimensional perspectives: formally (macro) through recognition of qualifications, institutionally (meso) through procedural support, socio-culturally (meso/ macro) via networks and discrimination, economically (macro) through funding and subjectively (micro) via knowledge of rights and opportunities. Matthes and Severing (2020) state that education for instance only works as a key for integration if access to education and the job market is guaranteed. As an important part of this security, the *Skilled Labour Immigration Act* [Fachkräfteeinwanderungsgesetz, FEG] provides comprehensible and reliable information about labor migration options, thereby offering potential for the successful migration of (future) skilled workers (Kühn et al., 2025). It is described in the following.

The *Skilled Labour Immigration Act (FEG)*, in force since March 2020 and amended in 2023, open up the labor market to skilled workers from countries outside the EU (third countries) with non-German vocational qualifications to enter Germany in all occupations (Federal Office for Migration and Refugees [BAMF], 2021). The amendments include the establishment of three pillars: Skilled workers, experience and potential (Schröder, 2024). The skilled workers pillar allows skilled workers with recognized qualifications to enter Germany. The experience pillar enables access to the labor market even without recognition of qualifications, e.g., through recognition partnerships. The potential pillar is aimed at job seekers who, under certain conditions, can obtain an opportunity card (Schröder, 2024).

The *function of the FEG* is to regulate access to labor migration in line with labor market needs and available capacity for qualification, training and measures. Although the FEG is only been in force for barely 2 years now, it already affected Germany's score at the Migrant Integration Policy Index (MIPEX). Positive evaluation was referred to labor market mobility, as Germany has improved equal opportunities for migrants from non-EU countries, in particular through targeted support measures and improved procedures for recognizing non-German qualifications and skills (Migration Policy Group [MPG], 2025). However, the evaluation results focus on temporary integration, the question of sustainable and long-term retention

<sup>1</sup> <https://www.unternehmen-integrieren-fluechtlinge.de/>

remains open (Fratzcher and Zinn, 2025; Loschert et al., 2025; Expert Council for Integration and Migration [SVR], 2025).

The *legal framework of the FEG* is complex with a variety of new options and the law has only been in force for a short time. Consequently, practical examples that can serve as guidelines for German companies are lacking. Moreover, *if access is regulated resp. Restricted*, structured preparation of skilled workers in their country of origin or besides the regular VET structures in the target country become relevant. In some cases, private recruitment agencies intervene in these countries and, in the absence of state control, exploit the migrant skilled workers. This increases the risks for potential migrants, weakens confidence in the chances of integration in Germany and jeopardizes the long-term retention of qualified skilled workers (Angenendt et al., 2023; Hanrieder and Janauschek, 2025).

In 2024, there were a total of 120,196 initial residence permits issued for labor migration and 74,9,335 initial residence permits issued for educational migration, which both fall under the FEG, mainly from Türkiye, India, Kosovo and Morocco (Heß, 2025). These figures include both persons without previous status and persons with a change of status. In the case of Germany, refugee migration and labor integration, as refugees become increasingly intertwined, may also be affected by FEG due to a change in status.

In addition to access, *accessibility* is important. Accessibility means enabling social participation and building capacities by designing inclusive environments, removing barriers, and reducing prejudice (Federal Accessibility Unit, 2024; Kunze, 2021). Accessibility operates on three dimensions: Transport and facilities, information, communication and understandable language, as well as social services (Kühn et al., 2025). Access and accessibility are important prerequisites, but they alone are not enough to ensure that skilled migrant workers remain in the country (Kühn et al., 2025). Successful long-term integration requires more than just job placement or opening up existing educational opportunities. Migrants must be recognized as responsible, capable, equal individuals and given targeted support to shape their lives independently and autonomously (Expert Council for Integration and Migration [SVR], 2021). This requires empowerment strategies that go beyond conventional integration measures and must be structurally anchored (Organisation for Economic Co-operation and Development [OECD], 2023). At present, vocational integration is often still unsystematic and based on experience, following the principle of 'trial and error'. Related to recognition of qualifications acquired abroad, this points out to certain structural weaknesses at recent state of practice (Expert Council for Integration and Migration [SVR], 2025), which make accompanying measures necessary to overcome the 'system error'. An effective integration system needs to go beyond formal access to create transparency, removes barriers and offer clear guidance so that migrants can achieve their vocational and individual aspiration.

One option is to focus on the capability approach (Nussbaum, 2000, 2011; Sen, 1999), which addresses the aspect of agency and concentrates on the conditions that need to be created in order to enable a life of dignity. The host society also carries responsibility to create the framework conditions for capability development, as these are influenced by both personal dispositions and the political, social and economic environment (Nussbaum, 2011). Another reason for the capability approach is that capability encompasses 'all potential functionings that people may reach, that is, what they could be or what they could do' (Bonvin, 2019, p. 279).

Furthermore, Nussbaum (2011) places education at the center of the capability approach, since 'education [...] forms people's existing capacities into developed internal capabilities of many kind' (p. 152).

In other words, this study examines the opportunities that VET providers offer in order to expand the capabilities of labor migrants and enable them to choose their own educational and career paths. The actual use of these opportunities depends on individual circumstances, but their potential is evident in the opportunities they open up. An examination of capabilities in the context of labor migration is also relevant because migration can be seen as a fundamental freedom that improves capabilities themselves (de Haas, 2009). I.e., migration itself can be seen as a capability, as human mobility encompasses 'people's capability to choose where to live, including the option to stay [...]' (de Haas, 2021, p. 1).

## 1.5 VET providers as gatekeepers

When it comes to fill a gap in the system, VET providers come into play, developing specific offers that are complementary to the existing structures but at the so-called education market. Their business bases on anticipating migrants' needs and translate these into tailor-made training and support measures. These measures address recent problems in the context of labor migration, e.g., recognition of qualifications acquired abroad, needs-based counseling, language acquisition support and the placement of company internships and work placements (Beicht and Walden, 2019; Organisation for Economic Co-operation and Development [OECD], 2019; Expert Council for Integration and Migration [SVR], 2025).

Migrant skilled workers need more than just labor market integration: They must be recognized and supported as capable actors in order to become independent. This requires professional management of expectations and prior knowledge, as well as the recognition of existing skills and the targeted promotion of co-determination and participation. These three aspects relate to the promotion of capability and accessibility, as expectation management involves the ability to manage expectations and prior knowledge. Professional expectation management is therefore a process that creates clarity, optimizes communication and utilizes knowledge (capability). The recognition of skills refers to the appreciation of individuals' competencies and is the basis for capability. Targeted promotion of co-determination and participation, in turn, correspond to the core of the social accessibility dimension. Sustainable integration requires not only adaptation on the part of migrants, but also structural openness on the part of the host society, in particular through flexible educational formats and innovation-oriented vocational concepts. This means that adaptable, differentiated support services (Mozetic, 2022) aiming to empower people and promote their independence in the long term, rather than offering short-term support that only covers urgent needs are needed (Eichsteller, 2021). Furthermore, comparative migration research argues that integration should not be understood as a one-sided adaptation, but as a reciprocal process between migrants and the host society (Bommes, 2011; Heckmann, 2015). At the same time, questions arise about the self-perception and responsibility of these VET institutions and how they balance business models and social responsibility.

## 1.6 Research questions

Since legal regulations already declare migrants who enter Germany for the purpose of an apprenticeship as skilled workers, not only employers but also VET providers play a crucial role in the integration process. This research aims at understanding the role of actors in the German public and private (C)VET sector and to examine how they promote capabilities in the context of labor migration. It also targets to analyze the potential for the sustainable integration of labor migrants. Based on the classification and the capability approach, the article focuses on the following research questions:

[R1] *How and to what extent do VET providers initiate and maintain integration and participation of migrants, and which structure elements specifically target capabilities?*

[R2] *How do VET providers perceive their own potential of contributing to a sustainable integration of work migrants in Germany and what challenges and opportunities to act are they facing?*

In the following, the theoretical background is outlined based on Heckmann's (2015) integration concept, defining a specific target state, and the capability approach according to Nussbaum (2000, 2011) and Sen (1999) as a concept on how to evaluate the chances to empower a society and its institutions in the particular context of VET. The analytical frame was deduced from this framework and applied in analysis and presentation of selected results as well as their discussion.

## 2 Theoretical background

Heckmann's (2015) integration theory serves as the theoretical foundation. To further develop the concept of integration, the capability approach according to Nussbaum (2000, 2011) and Sen (1999) is required. Finally, this chapter links Heckmann's understanding of integration and the capability approach to VET.

### 2.1 Integration

Esser (2000) has influenced the definition of the term 'integration' in the migration discourse. According to his understanding, integration means 'the cohesion of parts in a systemic whole' (Esser, 2000, p. 26). This definition can be applied to all systems, including the social system – society. Since integration addresses two essential units, namely the system as a whole and the parts that form it, two types of integration can be distinguished according to Esser (2001): System integration as the interaction of social components for smooth functioning and social integration as the embedding of individual actors in social and cultural structures. Accordingly, social integration means 'the inclusion of actors in the respective social systems' (Esser, 2001, p. 40). Esser (2001) distinguishes between four variants of social integration: Culturation (knowledge and skills for understanding and action), placement (social position), interaction (mutual social action) and identification (attitude of connecting with the social system).

Based on Esser's (2000, 2001) understanding of integration, Heckmann (2015) defines integration as a process of becoming a member based on reciprocity between migrants and the host society. This process takes place in four dimensions: Structural, cultural, social and identificative integration [aligned with Esser's (2001) four variants]. Structural integration aims to provide access to and quality of membership in the most important institutions of the host society, such as education, the labor market, social security and the political system. For sustainable integration, 'door openers' in these areas are essential (Heckmann, 2015; Wiebe, 2020), e.g., recognition of qualifications or placement services. Cultural integration refers to cognitive, cultural and behavioral changes in migrants, such as language acquisition and understanding of values. Since integration is a two-way process, it also requires cultural adjustments on the part of the host society, in particular through intercultural openness, which should be promoted by the state (Heckmann, 2015; Wiebe, 2020). Social integration is reflected in migrants' sense of belonging to the new society, which manifests itself in friendships, social networks and club activities (Heckmann, 2015). This also implies a reduction in boundaries and social distance between groups. The dimension of social integration can be both a consequence of cultural and structural integration and a prerequisite for identificative integration. Identificative integration therefore refers to 'changed feelings of belonging and willingness to identify with national, ethnic, regional and local collective structures' (Heckmann, 2015, p. 73).

The entire integration process is characterized by reciprocity: I.e., all the learning processes in these dimensions affect both migrants and the local community. This reciprocity 'takes place in the core institutions of society, whose rules migrants must learn, but whose function is only secured if they "open up" to migrants, i.e., respond in a certain way to the needs and requirements of migrants' (Heckmann, 2015, p. 80). With this description, Heckmann (2015) explicitly addresses the concept of the intercultural opening of institutions.

However, the concept of becoming a member should be viewed critically, as it implies an achieved and fixed state. This is not in the sense of this analysis, as it focuses primarily on the aspect of sustainable integration (Fratzcher and Zinn, 2025; Expert Council for Integration and Migration [SVR], 2025). For this reason, Bommers (2011) is used to expand the understanding of integration in this context. He, like Heckmann (2015), sees integration as a long-term reciprocal process, but does not prescribe rigid structures. In addition, Bommers (2011) places greater emphasis on the conscious avoidance of discrimination and on the participation of all in the central areas of social life, meaning education, training, labor market, law and social affairs. This understanding serves to underpin the concept of sustainable integration, because society must create structures and conditions to enable fair and equitable participation (Bommers, 2011). This requires structural and institutional resilience.

### 2.2 Capability approach

In the 1970s, Sen (1999) introduced the concept of 'capabilities' in contrast to 'functionings' and developed a theoretical approach around both terms. Capabilities, firstly, describe the actual degree of freedoms to which a person is able to live the kind of life it values (Sen, 1999). This also includes 'the alternative combinations of functionings that are feasible for her to achieve' (Sen, 1999, p. 75). Functionings,

secondly, represent the actual states and activities by a person, i.e., the realization of capabilities achieved.

Nussbaum (2000, 2011) further developed this idea and defines *capabilities* as ‘what people [are] actually able to do and to be – in a way informed by an intuitive idea of a life that is worthy of the dignity of the human being’ (p. 5). Functionings, in this regard, refer to the concrete life circumstances or realities that a person has actually achieved (Nussbaum, 2011). Capabilities then encompass potential courses of action (Nussbaum, 2011; Sen, 1999), offered and enabled by society.

Core of Nussbaum’s further development consists of two main aspects: First the definition of freedom and dignity as expression of social justice and, second, a list of 10 capabilities. These aspects are ‘Life,’ ‘Bodily Health,’ ‘Bodily Integrity,’ ‘Senses, Imagination and Thought,’ ‘Emotion,’ ‘Practical Reason,’ ‘Affiliation,’ ‘Other Species,’ ‘Play,’ and ‘Control over one’s Environment’ (Nussbaum, 2011). In the context of migration, all areas are relevant. In a welfare state, the questions of life and health are addressed to a certain degree. The match of both idea and actual implementation is highly relevant and would be object to a different study.

In the context of integration, several areas are particularly important, namely ‘Senses, Imagination and Thought,’ ‘Practical Reason,’ ‘Affiliation,’ and ‘Control over one’s Environment’ (Nussbaum, 2011). ‘Senses, Imagination and Thought’ refer to the ability to perceive the world with all the senses, to imagine the world, to think and to reason. This also includes the ability to utilize education, art, science and freedom of expression, but also to shape education, art and science (Nussbaum, 2011). ‘Practical Reason’ on the other hand, refers to the ability to develop an idea of good life and to plan and critically reflect on the life accordingly (Nussbaum, 2011). Nussbaum summarizes the ability to live in a community with others, to be respected and recognized and to show respect to others as ‘Affiliation.’ This also includes protection from discrimination and social exclusion, which can be a risk in migration. ‘Control over one’s Environment’ refers to two aspects: In the political sphere, it encompasses the possibility of co-determination and political participation, while in the material sphere, it refers to access to work, property and economic resources (Nussbaum, 2011).

Nussbaum’s approach to social justice is based on the idea that all citizens must achieve a sufficient level of ability in these 10 areas to respect their human dignity (Nussbaum, 2011). Her capability approach emphasizes that education and knowledge provide access to various capabilities and thus promote a self-determined and valuable life. One example of this is the acquisition of German language skills by refugees and migrants, which opens up opportunities for them to pursue a career, complete an apprenticeship and establish social contacts (Wiebe, 2020). In summary, capabilities refer to ‘a person’s real *freedoms* or *opportunities* to achieve functioning’ (Robeyns, 2017, p. 39).

However, not all people can convert the same resources into equal opportunities for fulfillment. For this reason, Robeyns (2017) introduced the conversion factors as a supplement. They can be defined as conditions that influence how well someone can convert given resources into actual capabilities (Robeyns, 2017). A distinction is made between three types: Personal, social and environmental. Personal conversion factors include, for example, health, age, gender and individual talents. It is therefore an individual’s personal characteristic that influence how they can use resources (Robeyns,

2017). Social conversion factors include social structures, institutions, norms and values that facilitate or hinder the use of resources. Even with good resources, discrimination can block access to work or education, for example. Physical and material environmental conditions are classified as environmental conversion factors. These can also influence resource use (Robeyns, 2017). They include, for example, climate, geographical location, transport links and safety in public spaces. This clearly shows that the social context has a major influence on individual conversion factors and on the capability set of a person.

## 2.3 Connection between integration, capability-approach and VET

The relevance of discussing capabilities also arises from the aspect of social justice, more specifically from the dimensions of enabling/capability justice and realization justice. This is because institutions and society should not only provide resources and goods, but also enable people to use them (enabling justice). Similarly, people have a right to realize this empowerment (realization justice) (Czollek et al., 2019). The capability approach, therefore, serves as a bridge between migrants and the host society (Wiebe, 2020). The capabilities-oriented-integration theory (Wiebe, 2020) combines the capability approach with the integration theory and offers a holistic view of the integration of migrants. The aim is to reduce institutional barriers to participation and to strengthen the individual resources of migrants in order to systematically create opportunities for participation (Wiebe, 2020).

In the field of VET, the capability approach enables the development of productive skills in three areas: Theoretical knowledge, technical skills and professional personality development (Wheelahan et al., 2019). By promoting these skills, VET contributes to social participation and integration, as described in Heckmann’s concept of social integration (Wheelahan, 2015). However, it is important to ensure that learners are not only recipients of VET, but also actors who shape it. ‘I.e., that they [the learners] receive adequate knowledge and are encourage to put into practice their theoretical and practical skills’ (Bonvin, 2019, p. 287). VET should go beyond productive workers and consumers and empower people to develop their own ideas and contribute them to society (Bonvin, 2019). In practice, it is often assumed that adults already possess this ability, but this overlooks real barriers such as educational disadvantage or social exclusion, which must first be overcome. Because ‘capability for education or VET can be defined as the real freedom to choose a vocational training program or curriculum one has reason to value.’ (Bonvin, 2019, p. 280).

For this reason, the aspect of motivation should be expanded within the personal conversion factors, to include, such as, the fundamental desire to pursue training (Bonvin, 2019). It is important to recognize that negative experiences at school, poor literacy skills or a lack of language skills can weaken the desire to pursue training (Bonvin, 2019). Nevertheless, two aspects can be derived from this: The desire for education and the ability to learn. These are closely linked to the ability to imagine a future for oneself and to strive for concrete goals (Bonvin, 2019). If education systems do not promote or restore this ability, there is a risk that those affected will settle into a passive attitude, for example, in permanent dependence on transfer payments or informal work.

## 2.4 Analytical frame

In order to answer the research questions, especially the first one, which deals with how and to what extent VET providers initiative and maintain the integration and participation of migrants, and which structural elements specifically target capabilities, an analytical framework based on the presentation of the theoretical background is required.

The theories of integration (Heckmann, 2015) and the capability approach (Nussbaum, 2000, 2011) were already described. The capability-oriented-integration theory (Wiebe, 2020) combines integration, capability approach and VET that promotes capabilities and integration (Wheelahan, 2015). The basis for this is access and accessibility, which were already defined in the first chapter. To classify the theories in this study, a visualization was created to provide clarity (Figure 1).

Access is the necessary condition, which is in this context only located at the macro level. It is determined, among other things, by political and legal frameworks, such as the FEG (Schröder, 2024). It is also accompanied by barriers that can restrict access, such as lengthy processing times for visa applications. These barriers are perceived by VET providers, who develop appropriate measures to improve accessibility on this basis (meso level). These measures can cover various dimensions: (1) information, communication and understandable language, (2) transport and facilities, and (3) social services (Kühn et al., 2025). The developed accessibility measures represent the sufficient conditions for integration. In addition, the measures can be assigned to the integration dimensions (Heckmann, 2015), which also provide the structuring framework for the presentation of the results. Heckmann's dimensions (2015) are used as an analytical structure, allowing various aspects of integration to be systematically recorded. In addition, by incorporating Bommes' understanding of integration (2011), the focus can be placed more on fair participation and social normalization.

In this context, integration refers to the creation of structures and framework practices to promote the integration of (labor) migrants, whereby the services and opportunities offered by VET providers are explicitly analyzed with regard to the integration dimensions, i.e., structural, cultural, social and identificative (according to Heckmann, 2015). Filsinger (2008) already established indicators for the dimensions of integration. Educational qualifications and access to the labor market are indicators of the structural dimension. In the cultural dimension, proficiency in the German language is a key indicator. It is more challenging to define appropriate indicators for the social and identificative dimensions of integration (Filsinger, 2008). One indicator in the social dimension is membership in associations and organizations. Nevertheless, he explicitly names the 'intercultural opening of the institutions of the host society [...] as a decisive indicator of successful integration' (Filsinger, 2008, p. 61). Accordingly, the structural dimension encompasses CVET opportunities and career paths. Teaching technical language and work culture, on the other hand, are aspects that belong to the cultural dimension. Mentoring and exchange programs are part of the social dimension of integration.

Based on this classification, the capability approach can then be applied, as the approach is completely universal: 'the capabilities in question are important for each and every citizen, in each and every nation, and each is to be treated as an end' (Nussbaum, 2000, p. 6). Accessibility measures may have the potential to promote capabilities which need to be examined. In order to provide a specific focus, this article concentrates on four capabilities that can be derived from the 10 capabilities identified by Nussbaum (2011). These include *vocational self-determination*, *social participation*, *control over the environment*, and *dignity and recognition*. The focus on four specific capabilities is based on the fact that the capability approach (Nussbaum, 2011), is normative, i.e., general in nature. In order to examine capabilities in specific contexts, specific capabilities need to be selected and developed (Robeyns, 2017). *Vocational self-determination* is particularly relevant for labor market integration

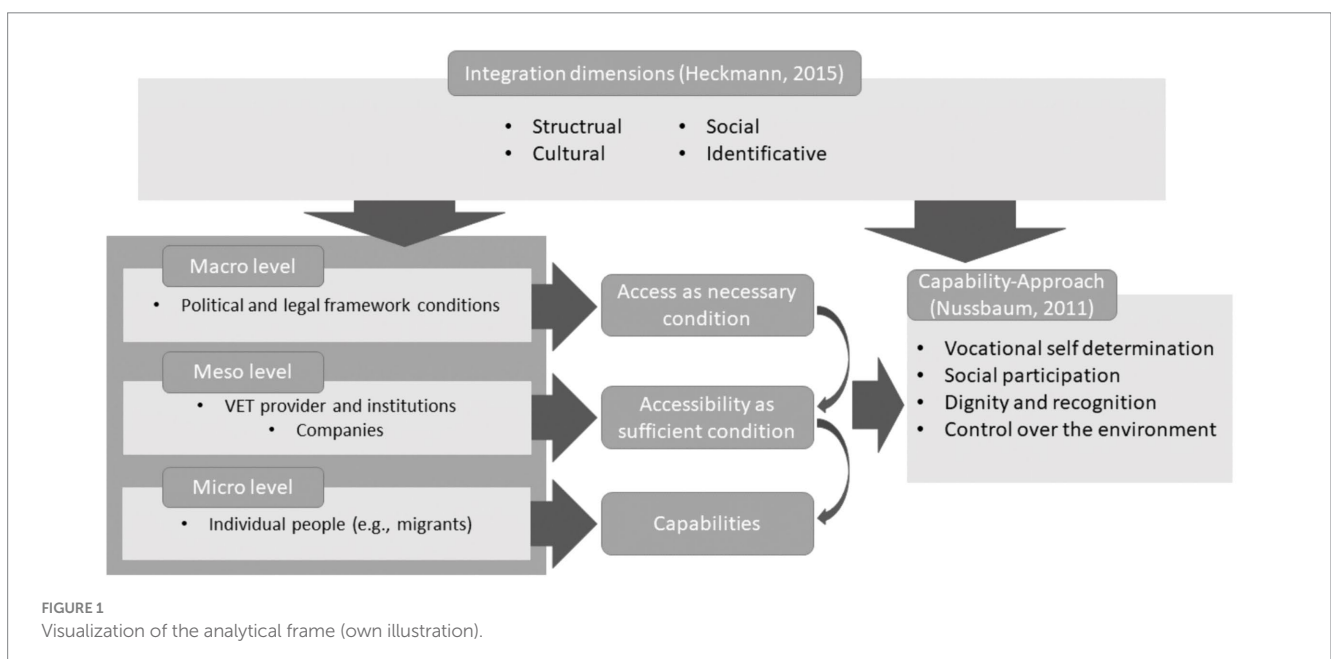


FIGURE 1 Visualization of the analytical frame (own illustration).

(Jeon, 2019). *Social participation* is also part of social integration and is therefore relevant in the context of migration and integration (Expert Council for Integration and Migration [SVR], 2025). *Control over the environment* is a prerequisite for shaping one's own life (Nassar, 2025). Perrin's (2025) study also advocates placing *dignity* at the center of migration studies.

*Vocational self-determination* encompasses the ability to actively shape career paths or vocational careers. This aspect can be derived from the capabilities 'Senses, Imagination and Thought' and 'Practical Reason' (Nussbaum, 2011). In addition, this capability can be also derived from the capability for work, which means that it is a person's 'real freedom to choose the job one has the reason to value' (Bonvin, 2012, p. 13). For this reason, a lack of resources and a lack of or limited access to work and education can restrict the development of this capability (Beierlinger et al., 2024; Bonvin and Galster, 2010). In contrast, structures that facilitate access could promote this capability (Jaschke et al., 2022; Expert Council for Integration and Migration [SVR], 2025).

*Social participation* derives from the capability of 'Affiliation' (Nussbaum, 2011). This can also be derived from the capability of 'Emotion' according to Nussbaum (2011), as 'Emotion' refers to the capability to form attachments to things and people. *Social participation* can be facilitated through exchange and networking with other people, including the establishment of social contacts (Barreto et al., 2022; Krieger et al., 2020; Expert Council for Integration and Migration [SVR], 2025). Accordingly, a lack of social contacts would limit the development of this capability (Brücker et al., 2025; Fratzscher and Zinn, 2025). However, the reproduction of everyday racism (Klaus and Kühn, 2025) and the resulting discrimination can also inhibit this capability. Attending learning courses, e.g., CVET courses, could promote the development of social contacts and networks (Granderath et al., 2021).

Another opportunity lies in *control over the environment*, which corresponds to 'Control over one's own environment' (Nussbaum, 2011). This includes the ability to take advantage of opportunities in the labor market, which in turn requires access to the labor market and specific advice and information from VET providers in order for participation to take place. *Control over the environment* can be promoted, for example, by fostering language skills (Esser, 2006; Newbery, 2025). Language also influences *social participation*, as it is a means of communication (Esser, 2006). Discrimination, e.g., in the housing market (Federal Government Commissioner for Migration, Refugees and Integration, 2019, 2024), would, on the other hand, influence the development of this capability.

*Dignity and recognition*, like *social participation*, can be derived from the ability to 'Affiliation', because this also encompasses the ability to possess and utilize the social foundations of self-respect, but also to be regarded as a dignified and equal person (Nussbaum, 2011). This also includes protection from discrimination. In this context, *dignity and recognition* mean respecting existing qualifications and skills and recognizing someone as an equal skilled worker. However, this also includes the inclusion of people, because social exclusion would mean that individuals are not recognized and valued as persons (Eckhard and Siegert, 2024; Fuchs et al., 2025). Social exclusion would also have an impact on the capability of *social participation*.

These four specific capabilities thus already cover six of Nussbaum's (2011) universal capabilities. The capability 'Life' represents an overarching capability that forms the basis of all specific

capabilities. Similarly, the capabilities 'Bodily health' and 'Bodily integrity' can be considered in the context of sustainable integration, particularly into the labor market, as human working conditions and access to health systems are part of sustainable labor market integration, although these were not surveyed in this study. 'Play' as a further capability can be indirectly covered by *vocational self-determination*, *social participation* and *dignity and recognition*, as the ability to play can be used to establish social contacts, but also to strengthen *vocational self-determination*. 'Other species' are excluded from this study, as according to Nussbaum (2011), this mainly refers to living beings in the form of animals and nature or plants. Furthermore, this study is not a comprehensive capability assessment, as the focus was solely on these four capabilities.

This study then begins by identifying the accessibility measures offered by VET providers and placing them in the context of the corresponding access conditions and barriers. This identification takes place within the conceptual framework based on Heckmann's (2015) integration dimension, so that each identified measure can be assigned to at least one integration dimension. Based on this analysis, the discussion section examines the capabilities described here and classifies the attitudes of VET providers with regard to their potential for sustainable integration.

### 3 Methods

This research took place in the context of an EU-funded research project 'Skills partnerships for sustainable and just migration patterns (Skills4Justice)<sup>2</sup>'. Within the project, data have been collected related to labor market, sector-related perception of skills shortages and linkage of labor and education system. The data basis covers document analysis (Salheiser, 2022) of political papers, legal regulations at the national and federal level as well as national statistics. Moreover, problem-centered interviews (Witzel, 2000) were conducted with different groups of actors in the mentioned fields. This research re-analyses already collected data targeting a deeper understanding of the underlying structures related to integration and empowerment putting the lens on VET providers as gatekeepers between migrants and institutions. Details of the research conduction and analysis procedure are described in the following.

#### 3.1 Data collection

The interviewees represent different status groups, i.e., employers, employers' organizations, political decision-makers, VET institutions, vocational schools, and political actors in Germany. Within these groups, leaders, human resources managers, chambers, school principals, teachers, and placement agencies, as well as actors from federal ministries and employment agencies were interviewed. The relevant stakeholders were identified using three strategies: (1) by identifying the key actors in the field of labor migration and their recommendations, (2) by researching websites (e.g., through relevant content such as language courses or current news) and (3) using the

<sup>2</sup> <https://skills4justice.eu/>

Respond-Driven-Sampling (RSD) method (Volz and Heckathorn, 2008).

The sample consists of a total of 40 stakeholders who have been interviewed in relation to the integration of migrant skilled workers, but only 33 are considered in this study. The reason for this lies in the content of the interviews, some of which do not fit this focus. The interviews lasted about 60 to 90 min and were conducted in German. A detailed list of the selected ones from the 40 interviews can be found in Table 1. The stakeholders covered the following sectors: Hospitality and tourism, agriculture, IT and digitalization, transport and logistics mechanical engineering and industry, construction and craft, social and educational affairs as well as healthcare and nursing. Furthermore, not-sector-specific intermediaries were also interviewed.

### 3.2 Data analysis

The interviews are analyzed with regard to strategies and their potential in the context of the integration dimensions (Heckmann, 2015) and the capability approach (Nussbaum, 2000, 2011). Also, the FEG as relevant legal framework is taken into account. For the analysis, the qualitative thematic analysis according to Kuckartz and Rädiker (2024) is applied. For the present analysis, the existing codes from the common category system within the Skills4Justice project were restructured and assigned to Heckmann's (2015) dimensions of integration.

This involved a deductive, theory-driven mapping of already coded segments onto a theoretical grid, which means that this methodological approach can be described as secondary analysis or theory-driven re-coding according to Heaton (2008). An overview of the codes is shown in Table 2. It starts with number 3, as numbers 1 and 2 contain contextual information and coordination of supply and demand, but these are irrelevant in this context. Although re-coding took place, the context was not disregarded, as the re-coding mainly consisted of a restructuring of the existing codes. The codes were kept general and could theoretically be assigned to several integration dimensions. The assignment was made at segment level by checking within the codes which segments best matched the dimensions based in the analytical frame. A more detailed description of how the identified

opportunities relate to the dimensions of integration and their potential for promoting capabilities is provided in Chapter 4 and 5.

## 4 Findings

A total of 24 measures in the area of accessibility were identified from the interviews, which can be assigned to the specific integration dimensions (Heckmann, 2015). It should be noted that the classification and differentiation between the integration dimensions are artificial, i.e., these dimensions are closely linked and intertwined, which means that support for other integration dimensions cannot be ruled out. It should also be emphasized that this study merely identified measures that may have an impact on capabilities and does not represent any actual causality. The following sections presents examples of specific accessibility measures for each dimension, as well as the preceding access framework conditions and the barriers. For readability reasons, each section starts with a tabular overview of the findings (Tables 3–6), which are then described more detailed.

### 4.1 Structural integration dimension

The structural integration dimension according to Heckmann (2015) encompasses access to education and the labor market. In addition to legal regulations, this also includes offerings from VET providers to facilitate or support access to education and the labor market.

In terms of structural integration, the FEG regulates general access to the German labor market offers three pillars through which migration is possible (Schröder, 2024). Despite the legal regulations, barriers exist, particularly in the area of bureaucracy, as I42 points out: 'All the problems with visa procedures, foreign offices, etc.' (pos. 22). To address this barrier, some interviewees have already established appropriate measures to improve accessibility. These include assistance with bureaucratic matters, as reported by I22. Subsequently, bureaucratic barriers also arise in the area of recognition procedures. These are regulated by the 'Act on the Assessment and Recognition of Professional Qualifications Abroad',

TABLE 1 Distribution of interviews: sectors and status groups (own compilation).

Sector	Employer	Employer's organization	VET and HE	Intermediaries	Political actors
Healthcare and nursing			I18		
Social and educational affairs	I2, I3, I4		I19, I21, I37		
Construction and crafts		I5, I6	I22, I23, I24, I25		
Mechanical engineering and industry		I38	I26, I27, I41		
IT and digitalization	I7				
Transport and logistics	I8				
Agriculture		I9, I10			
Hospitality and tourism			I36		
Crossover			I28, I29, I31	I11, I13, I14, I15, I16, I17	I32, I42

TABLE 2 Relevant categories and codes of the common category system and the number of the coded segments (own compilation).

No.	Category	Code	Sub-code	Number of coded-segments
3	Perception of industry-specific skills shortages	3.1	Attitude toward skills shortages	61
		3.2	Strategies for dealing with skills shortages	39
4	Relations to the education and VET system	4.4	Most important activities of the company from its own perspective	56
		4.3	Future challenges	37
5	Experiences with labor migrants	5.1	Perceived access of labor migrants to the (vocational) education system	52
		5.2	Perceives barriers of labor migrants in work and education	83
		5.3	Vulnerability	32
		5.5	Effective measures for skills development/ retraining of labor migrants	67
		5.7	Integration	20
		5.8	Potentials	8
6	Recognition of qualifications	6.2	Concerns and challenges	47
		6.3	Opportunities	33
7	Employee recruitment and retention	7.2	Addressing the issue of labor migrants in recruiting	24
		7.3	Obstacles and challenges in recruitment and retention	73
		7.4	Differences between local employees and labor migrants	27
		7.5	Germany as a pull factor: transit or destination country	46
		7.7	Measures and benefits	41
		7.8	Risks and challenges	54

which stipulates that access is a prerequisite (Recognition in Germany, 2025a), but the processes sometimes last too long (e.g., mentioned by I32).

If a recognition procedure ends with partial recognition, there are various compensation measures to bridge the gap between vocational qualifications from abroad and the German reference occupation (Recognition in Germany, 2025b). These compensation measures only apply to regulated occupations, such as those in the care sector. One type of compensatory measure is the knowledge test. To simplify this process, some interviewees

‘[...] have developed a project [...] to prepare nursing staff from abroad for the knowledge test. If they come from outside the EU to work here, they have to take a knowledge test. We prepare them for this and qualify them in the nursing sector.’ (I21, 10)

Another opportunity is adaptation training, which applies in the case of partial recognition in the non-regulated sector. This adaptation training can take the form of on-the-job training. On-the-job training would also increase the likelihood of ‘finding the right personnel for the job’ (I8, 35).

One requirement for migration, which is enshrined in the Residence Act (§16a), is the provision of accommodation for migrants. This also applies to skilled migrants. However, as housing is scarce in some regions, it can be difficult to find suitable accommodation. Migrants sometimes ‘[...] find themselves in precarious housing situations. [...] Landlords are

exploiting the situation by renting out rooms at exorbitant prices’ (I21, 99). This barrier not only influences the structural dimension of integration, but also the cultural dimension, as it relates to the provision of housing, but ‘good’ accommodation can also contribute to integration into a residential neighborhood. To ensure that housing does not pose a barrier, some VET provider rent flats to provide accommodation for migrant skilled workers. In some cases, this takes the form of shared flats, meaning that several migrant skilled workers live together in a flat rented by the VET providers, as I4 reported. The barrier of a lack of housing is also linked to the issue of mobility, as some flats are only available at affordable prices in rural areas. Since not everyone, and therefore not every migrant worker, has a driving license, and public transport connections are sometimes poor, this represents a further barrier (e.g., emphasized by I6). I25 addressed this barrier by enabling the financing of driving licenses for migrant skilled workers through the creation of a program for this purpose:

‘We had a project [...] where they could get their driving license. The measure is mobile in the skilled trades, so it was only aimed at refugees, but it needed to be looked at because we have very poor bus and train connections here.’ (I25, 22)

The Qualification Opportunities Act regulates CVET support for employees (Federal Ministry of Labour and Social Affairs [BMAS], 2025). It also stipulates that everyone is entitled to and able to participate in CVET. This also includes migrant women. To be able

TABLE 3 Structural integration dimension (own compilation).

Structural integration dimension					
No.	Access	Barriers	Accessibility measure	Dimension of accessibility	Interviewees
1	Skilled Labour Immigration Act	Bureaucratic barriers, e.g., in form of long waiting times for visa procedures	Assistance with bureaucratic matters	Social services	I22, I37
			Support during the migration process		I15, I27
			Participation in welcome guides Project		I9
2	Act on the Assessment and Recognition of Professional Qualifications Abroad	Long process and sometimes only partial recognition	On-the-job-training for post qualification	Social services	I8, I7
			Preparation course for the knowledge test	Information, communication & understandable language	I21, I17
3	Accommodation as a prerequisite (Section 16 of the Residence Act)	Housing is expensive; affordable housing often only be found in rural areas	Provision of accommodation	Transport & facility	I13, I4, I29
		Mobility problems due to poor public transport connections	Enabling the driving license through financing (in the form of projects)		I25
4	Qualification Opportunities Act for CVET	Difficulties in coping with learning requirements;	Learn coaches	Social services	I19, I18, I24, I23
			Referral Counseling		I25, I21
		Migrant women: need childcare, but there are not enough childcare places	Childcare facilities in VET institutions	Transport and facility	I31, I21
5	Disadvantage Compensation Act	Difficulty in obtaining information	Inform about disadvantage compensation	Information, communication & understandable language	I41
			Implementation of disadvantage compensation	Social service	I37, I36
6	Digital tools	Are sometimes not permitted in teaching	Digital translation programs, e.g., AI	Information, communication and understandable language	I36, I18
			AI chatbot for recognition counseling	Social services	I16

to participate in CVET, appropriate childcare is needed. Yet, as childcare places are scarce and information on how to obtain them is not easily accessible (Geis-Thöne, 2024), it cannot be guaranteed that every child will have a place in childcare. I31 recognized the need for appropriate childcare places, particularly to enable migrant women to participate in CVET. For this reason, this VET provider established appropriate ‘[...] childcare facility [...] with people who look after the children here in the building during this time, and we have noticed that these women [migrant women] have virtually no opportunity to get training anywhere else but here’ (I31, 45). Attending CVET courses also promotes the development of social contacts and networks (Granderath et al., 2021), which is why this opportunity has additional effects on the social integration dimension.

## 4.2 Cultural integration dimension

According to Heckmann (2015), the cultural integration dimension refers to the acquisition of knowledge, skills, and orientations that enable individuals to function effectively in their destination country. This includes language skills and education, but also an understanding of social norms.

The FEG also sets out the relevant requirements. One of these requirements is an appropriate level of language proficiency, which varies within the individual pillars (Schröder, 2024). The minimum level of language proficiency is B1 or B2. Despite this requirement, language remains one of the biggest barriers, as I25 reported. As attending language courses cannot be guaranteed everywhere abroad due to a lack of appropriate facilities, migrant skilled workers

TABLE 4 Cultural integration dimension (own compilation).

Cultural integration dimension					
No.	Access	Barriers	Accessibility measure	Dimension of accessibility	Interviewees
7	Language level requirement under the Skilled Labour Immigration Act	Attending these language courses	Language courses	Information, communication & understandable language	I36, I22, I24, I25, I23
		Occupation-specific language	Vocabulary flyers		I11
		More linguistic support is needed	Language sensitive teaching		I36
			Simplification in the classroom		I22, I23
8	General Equal Treatment Act (AGG)	Heterogeneous groups: different levels of knowledge among trainees	Team teaching	Social services	I24

TABLE 5 Social integration dimension (own compilation).

Social integration dimension					
No.	Access	Barriers	Accessibility measure	Dimension of accessibility	Interviewees
9	General Equal Treatment Act (AGG)	Racism in everyday life/reservations among the workforce	Raising awareness among the workforce (through intercultural training)	Social services	I9
10	Legal requirement for the participation of people in social life (Social Security Code IX)	Lack of social contacts	Social events	Social services	I7, I15
			Mentoring programs		I15, I23, I18

TABLE 6 Identificative integration dimension (own compilation).

Identificative integration dimension					
No.	Access	Barriers	Accessibility measure	Dimension of accessibility	Interviewees
11	General support without reference to a specific access	/	Personal support	Social services	I22, I18
			Close contacts with trainees and apprentices		I15

Barriers in this dimension are not explicitly found in the data collected, but they can be derived from the previous barriers in the other integration dimensions. The identificative integration dimension is very closely related to the other integration dimensions.

learn independently, e.g., ‘[...] online via YouTube and various online channels’ (I15, 32). A lack of language skills or language as a barrier can be a barrier to social integration as well as cultural integration, as language is a means of communication and is therefore considered key to integration (Esser, 2006). For this reason, some migrant skilled workers need appropriate support. This is provided, among other things, through additional in-house language courses, such as those offered at the VET institution of interviewee I23.

‘In the first year of apprenticeships, we have been offering support courses for a year and a half now, consisting of three double lessons per day, where students are taught according to their individual needs.’ (I23, 32)

Since companies and occupations often use specialized language that includes technical terms not taught in general language courses, this presents an additional barrier. To help overcome this, I11 developed vocabulary flyers for specific occupations.

To ensure that migrant skilled workers can keep up linguistically in class, I36’s VET institution focus on language-sensitive teaching and use appropriate tools. The introduction of language-sensitive teaching also enables equal participation for heterogeneous groups. An additional measure that supports this is ‘[...] team teaching, which is a great concept and works very well. It has the dual effect of allowing you to observe each other in a collegial manner’ (I24, 61). Through collaboration between teachers, different didactic and linguistic approaches can be

created. Team teaching also enables identificative integration, as collaboration between teachers allows the needs of trainees to be addressed, opening up opportunities for identification with the training cohort.

### 4.3 Social integration dimension

The social integration dimension refers to the integration of migrants into social relationships and networks (Heckmann, 2015). This includes social contacts as well as personal relationships between migrants and people in the destination country. Social integration takes place not only in the private context, but also in the public context, e.g., VET institutions.

The General Equal Treatment Act [Allgemeines Gleichbehandlungsgesetz, AGG] is Germany's anti-discrimination law and aims to protect people from discrimination, including on racial grounds (Federal Anti-Discrimination Agency, 2024). This law applies to all areas of life, including work, everyday life and finding accommodation. Everyday racism, which is, e.g., expressed through the use of the concept of 'othering' (Stiller, 2024), is a barrier to social integration. I10, for example, highlights the positive characteristics of migrant skilled workers, but uses the principle of othering by making general attributions about inner attitudes (see also Klaus and Kühn, 2025).

'Or I would even like it if there were a few more [skilled migrant workers], because I think they would have a different perspective on the training program or on Germany as a country [...] they come here with a completely different [...] inner attitude and do their training here or work here because they know that they can achieve a lot here. And I do think it would make sense to support that. And I believe that the trainees or even the employees [locals; authors' note] can sometimes learn a thing or two from them. In terms of their attitude [...]' (I10, 45)

Another barrier in this area is the reservations of local employees toward migrant skilled workers (stated by I11). In order to raise awareness among the workforce, some VET provider have already offered intercultural training courses, especially '[...] after the issue of refugees became a hot topic in Germany. These courses helped to raise awareness among our staff' (I9, 71). This has also an impact on the identificative integration of (labor) migrants, as it not only enables improved coexistence, but can also influence working relationships and atmosphere.

Access is a necessary condition, but a lack of social contacts can hinder accessibility and, in particular, social integration, as it leads to exclusion and can result for instance in homesickness things (reported by I5). To promote opportunities for social participation, I7 (pos. 87), '[...] organize[s] a few social events'. Social events enable relationships to be built and a sense of belonging to be developed. I15 reports on a company's efforts to facilitate social contacts.

'He [an employer] has hired two skilled workers, [...] from abroad, in the company. They play football together, so they do various activities together with these skilled workers to make them feel comfortable, to keep them creative and to keep them active in the company.' (I15, 56)

Social events also have an impact on the identificative dimension, as interaction with other people and networking can lead to the development of a sense of belonging that is not only related to the work context but can also be extended to everyday life. Mentoring programs, for example '[...] to minimize the drop out rate' (I23, 90), also help to enable people to participate in social life, as mentoring programs promote both vocational and social integration (Krieger et al., 2020).

### 4.4 Identificative integration dimension

Identificative integration refers to feelings of belonging and identification with national, ethnic, regional and local structural structures (Heckmann, 2015).

It is closely linked to the previous dimensions of integration, which makes it difficult to identify corresponding access opportunities, barriers and accessibility measures. However, personal support, which is explicitly provided by I22 and I18 in the form of close supervision of trainees and assistance with 'little things' (I22, pos. 65), can strengthen identificative integration.

'Well, I think our colleagues are incredibly close to the students. We are a school where everyone is treated as equals. We also get feedback on what might be challenging for them in their private lives or at work.' (I18, 62)

Many of the measures described in the previous chapters also have an impact on the identificative dimension of integration, such as offering social events or opportunities to do things with colleagues outside of work.

### 4.5 Attitude of the VET providers

Labor migration is considered to have 'very, very great potential' (I7, 42), especially in terms of meeting the demand for skilled workers in Germany, as mentioned by I15. The commitment of migrants is particularly emphasized. People, '[...] who have actually fled here due to economic reasons [...] are the ones who integrate very well' (I23, 88). In contrast, some emphasize that labor migration is difficult and that priority should be given to utilizing the skilled labor potential available in Germany, particularly among refugees and the unemployed, in order to remedy the shortage of skilled workers (e.g., emphasized by I3). It is also recognized that remedying the shortage of skilled workers through migration, whether refugee-related or work-related, is 'an illusion' (I26, 37), as Germany is an '[...] unattractive location' (I26, 37).

However, these statements are only found in very few cases. In general, an awareness of the need for skilled labor migration can be found in the interviews. Linked to this insight, a high sense of responsibility and willingness to take risks, which is essential for the sustainable integration of migrants, is also underlined.

'But you also have to take a bit of a risk. And I mean, with the few alternatives we have to cover the whole thing [shortage of skilled workers], this [labour migration] is the one that promises the greatest success, in my view.' (I4, 66)

Nevertheless, it is emphasized that this comes with [...] a very high level of responsibility for a person's happiness and life path' (I38, 98), which leads to a certain degree of skepticism.

Another aspect mentioned in this regard is the relationship between economic benefits and the challenges or effort involved in implementing labor migration (e.g., by I32). This perspective is also supplemented by I16, who explicitly points out that migration should be explicitly geared 'toward the acute concrete needs of the German labor market' (pos. 16). In addition, some interviewees highlight how important it is to focus on the migrants and their individual needs 'on human level' (I2, 11) and support requirements in order to ensure successful integration and social participation. The focus on the human aspect is also reinforced by I9, as he reports on unequal treatment between migrants and the local population. The interviewee describes a perception of unequal treatment in the media and society, referring to selective perception and a shift in discourse that exists in the social debate on migration and crime. The 'unequal treatment should be avoided' (I28, 91), e.g., by managing 'to bring people who are in Germany into contact with migrants' (I15, 50).

The awareness that 'migration is happening anyway' (I4, 68) underscores the need to actively shape both migration and integration in order to ensure long-term sustainability. But also, to guarantee that this [...] takes place in a safe, orderly and regular manner, with good working conditions and information' (I4, 68). This quote makes it clear that regulated migration is important to protect migrants from exploitation and precarious jobs, but also to ensure integration.

The degree of commitment on the part of VET providers and companies also depends on the background of the migrant. On the one hand, the motivation of the migrants plays a role, i.e., commitment and resources are preferably used where genuine interest and willingness to participate are evident, while people who are unwilling to cooperate are hardly supported, because '[.] there are also people who do not want to. We're not going to waste our resources on them. But for those where you say it makes sense, we are on it.' (I18, 32). On the other hand, socio-economic background must be considered, as factors such as family situation, financial resources and available opportunities have an influence on integration and training opportunities.

## 5 Discussion

The following section discusses the findings presented in Chapter 4 in relation to the research questions posed at the outset: (1) how and to what extent VET providers initiate and maintain the integration and participation of migrants, and which structural elements specifically target capabilities; and (2) how VET providers view their own potential with regard to sustainable integration as well as related challenges and opportunities.

### 5.1 Contribution of VET providers to migrants' capabilities

For improved comprehensibility, this chapter is structured using subheadings based on the dimensions of integration according to Heckmann (2015).

#### 5.1.1 Structural integration dimension

At the structural integration dimension, there is potential for promoting the capabilities *control over the environment* and *vocational self-determination* through preparatory courses as part of the recognition process. Recognition of qualifications enables migrant skilled workers to apply their knowledge and skills in a work context, thereby promoting *vocational self-determination*. Furthermore, recognition results in the possibility of changing jobs, as the qualifications are equivalent to the German reference qualifications. This would for example expand the mobility options for migrants. Nevertheless, the recognition process is associated with many barriers (Expert Council for Integration and Migration [SVR], 2025). In addition to bureaucratic barriers, there are other problems, such as a deficit-oriented approach. Complex, lengthy bureaucracy and the systematic devaluation or invisibility of vocational and educational resources can create a double burden (Leininger et al., 2025). This, in turn, can lead to a loss of *control over the environment* and limited *vocational self-determination*.

A central aspect of the national skilled labor strategy currently consists of attracting migrants to so-called shortage occupations [Mangelberufe]. This leads to a restriction of migrants' freedom of choice and ability to change a job. As a result, access is tightly regulated, leading to a selective approach of migrants. Another aspect associated with the shortage occupations is the market-driven VET offer. VET providers would place their business where the funding is, and funding is linked to the national skilled labor strategies. Here, migrants moreover compete with the 'silent reserve', which contains for example refugees and women (e.g., mothers, part-time employed or long-term unemployed) (Bauer et al., 2024). Lately, refugees became more attractive for employers, as they are already familiar with the culture of the target country, including language knowledge and work culture. They already fulfill requirements, which have to be organized for future skilled workers from abroad.

The provision of accommodation at the beginning of the migration process, and especially in the first year, helps migrants to meet the requirements for migration under the Residence Act. However, migrants often experience discrimination in the housing market (Federal Government Commissioner for Migration, Refugees and Integration, 2019, 2024). This experience of discrimination also influences the development of capabilities, as discrimination is classified as a form of social conversational factor (Robeyns, 2017). This means that discrimination in the social sphere also influences other conversational factors, such as the individual, because negative experiences of any kind can limit the development of capabilities (Bonvin, 2019). Providing initial accommodation can promote *social participation*, as migrants are given the opportunity to establish initial contacts in the neighborhood, which can then be used as potential support in finding housing. This illustrates that VET providers offer services, but these need to be financed. At the moment, it means that companies' readiness to pay for someone else's chance is necessary (employer pays). In order to encourage companies to pay, the services of VET providers need to be professionalized. However, the services do not extend beyond 1 year after migration to Germany, so the question of sustainability remains unanswered. The potential lies in the role of VET providers in helping both migrants and companies to define structures in a fair and sustainable manner. The challenge here is the high level of competition in the market, combined with almost no regulatory options in terms of the quality and reliability of service providers.

Providing childcare facilities in VET institutions gives migrants the potential to develop *vocational self-determination, control over their environment* and *social participation*. Participation in CVET enables the development of qualifications, which can support *vocational self-determination*. In addition, migrants gain *control over their environment* as participation in CVET allows them to maintain a balance between family and work. Connecting children to the local community through childcare provides two types of support: On the one hand, the establishment of social contacts in the context of CVET, which promotes social integration in addition to language support (Fratzscher and Zinn, 2025; Granderath et al., 2021). On the other hand, networking with families via their children and their childcare facilities, which can result in further potential for *social participation*. Networking and social inclusion also contribute to being recognized and appreciated as a person (Fratzscher and Zinn, 2025; Expert Council for Integration and Migration [SVR], 2025), which in turn creates secondary potential for promoting *dignity and recognition*.

All mentioned measures are highly relevant. However, there is no easy and holistic approach that would provide migrants with tailored support according to their needs. The landscape is rather varied, providers compete and funding is mostly limited in time/financial resources. Even a part-time apprenticeship is a problem and so are CVET offers (Kühn and Ambrosi, 2025). Better monitoring at regional and federal level could contribute to a more efficient distribution of resources and offers. What already is in action, is the distribution of migrants to different federal countries [Länder]. But the variety of offers is located in the cities.

### 5.1.2 Cultural, social and identificative integration dimension

In the dimension of cultural integration, a number of language support formats are offered that can have an impact on all four capabilities. In particular, language support and language acquisition enable individuals to gain *control over the environment*, as this makes information more comprehensible and simplifies communication (Esser, 2006; Newbery, 2025). The acquisition of the German language also contributes to *social participation*, as language is an essential element of communication (Esser, 2006). However, the analysis also showed that not every VET institution has established appropriate programs, which means that migrants learn the language independently in order to meet the prescribed entry requirements. On the one hand, this can be seen as problematic, as it can lead to possible lack of language skills, but on the other hand, it shows that migrants are able to shape their own environment. A major problem in this respect is fraud with language certificates or the focus of language courses on general rather than specialized language knowledge. Moreover, some courses seem to prepare migrants for passing the exam without considering the requirements of the targeted profession. The potential in this regard lies for instance in the workplace integration of language learning. This would also improve the chances of social integration for migrants, as it would give them the opportunity to build stable relationships. Public VET schools in particular became creative in implementing language-sensitive teaching materials when faced with rapidly growing heterogeneity in their courses. This shows that there is a certain awareness of the migration process with regard to additional language support. This promotes integration into the entire class, as migrants are not 'outsourced' to extra language courses. Therefore, social inclusion is promoted. Moreover, it serves to recognize migrants

as skilled workers and individuals in a class (Eckhard and Siegert, 2024; Fuchs et al., 2025). This results in the possibility of social participation and the promotion of the capability *dignity and recognition*, as migrants are recognized as individuals. Language is therefore not only an essential element in cultural integration, but also in social integration.

In addition, discrimination was identified as a barrier to social integration, mainly in the form of everyday racism, which often has an unconscious and inconspicuous effect. Discrimination can lead to social exclusion (Eckhard and Siegert, 2024; Fuchs et al., 2025). But it also limits the capability of *dignity and recognition*, as people are not recognized as valuable and worthy individuals, but are marginalized. This also has an impact on other capabilities (*vocational self-determination, social participation* and *control over the environment*), as discrimination can lead to paralysis of action: People who are discriminated may feel excluded and therefore lose the confidence to participate in society or shape their own environment.

Based on the analysis, measures for social inclusion are primarily implemented through the individual commitment of individual actors, both public and private. The social aspect appears to be a key factor, both in terms of conversion factors and integration. Social inclusion opens up many opportunities, such as access to friendships, but also finding work or getting help with changing jobs (Bommes, 2011). Social contacts can then help to support *information, communication and understandable language* – a dimension of accessibility (Kühn et al., 2025). Individual commitment can also be seen as a reason for the insufficient promotion of social inclusion, as this requires the removal of structural barriers and missing resources. Social inclusion needs change and binding structures at the institutional and societal level. A lack of resources (e.g., personnel, financial) as systematic barriers lead to failure on part of the stakeholders. And this is precisely where the concept of social integration applies. Individual initiative can provide impetus, but without sustainable support and the removal of barriers, the promotion of inclusion remains insufficient, resulting in institutional and structural resilience gaining relevance (Fratzscher and Zinn, 2025; Expert Council for Integration and Migration [SVR], 2025). Changes at the institutional and societal level thus demand social innovations (Howaldt and Schwarz, 2010).

In summary to the first research question, public-private VET providers primarily support the integration and participation of migrants through a variety of structured programs centered on the structural dimension. There is also potential for promoting capabilities, but this remains largely on a surface-level. The potential is recently limited by the often market-driven (or funding-driven) provision, the lack of quality control and monitoring, as well as a great variety of services, which are not necessarily linked or even competitive. Potential opportunities for capability development would need effective controlling of offers in line with the specific needs of the target group and the local conditions. Interactive, supportive network structures, e.g., based on communities of practice or the active creation of low threshold social areas (Barreto et al., 2022), seem to be promising. Further, competitive pressures need to be reduced.

### 5.2 VET providers' attitude as key to perceiving own potential

The majority of stakeholders recognize the potential of labor migration to meet the demand for skilled workers. Due to the

responsibility, pressure and risks involved in labor migration, some interviewees were ambivalent and cautious. This responsibility includes the social integration and participation of migrants. That also requires sufficient support from VET providers. Stakeholders who take on this responsibility are aware of migrants as independent and dignified individuals ([Expert Council for Integration and Migration \[SVR\], 2025](#)). Accordingly, integration and migration policies should be designed in a way that the individual needs of migrants are taken into account ([Expert Council for Integration and Migration \[SVR\], 2025](#)).

As many measures are based primarily on individual commitment, a connection can be assumed between the willingness to engage with the migration process and associated responsibility, and the introduction of appropriate accessibility measures. The lack of social activities can also be derived from the economically oriented perspective of VET providers, which focuses primarily on qualifications and the economic efficiency of the German labor market rather than on migrants as individuals. This highlights the importance of considering the business model of private VET providers, which ensures that the migration process is accompanied and initial support is offered, but only for a limited period of time. Sustainable integration requires the strategic processes to be anchored in the business model for long-term support and empowerment ([Eichsteller, 2021](#)), as migration itself is a capability ([de Haas, 2021](#)). People who migrate have the ability to decide where they want to live and where they want to stay. Although this ability is influenced by external factors, for instance in the case of migration due to flight, migration itself is nevertheless a capability. If their sustainable integration and, in particular, social inclusion is not promoted, these individuals have the ability to leave a country again, as they have already done so once before, meaning that Germany is no longer a destination country, but merely a stopover. The more positively and sustainably integration is understood as an independent educational task, the greater the provider's contribution to the social and vocational integration of migrants.

The second research question can be answered by saying that the majority of VET providers sees their role as crucial, but at the same time point to limitations in resources and structures. They are aware that integration is a shared responsibility and requires both suitable institutional framework conditions and individual commitment in order to support migrants sustainably and ensure their social participation.

## 6 Conclusion

This study followed two research questions. The first one asked about *the initiation and maintenance of integration and participation of migrants by VET providers and corresponding structural elements with regard to capabilities*. VET providers take efforts at organizational level to provide support services for (future) labor migrants. There are already some accessibility measures in place that can have an impact on the promotion of capabilities, but this study cannot say whether these capabilities are actually being realized, as the individual circumstances and conversion factors of migrants must be considered ([Robeyns, 2017](#)). Only by taking all perspectives into account is it possible to gain a holistic view of the integration process. It also became apparent that the promotion of capabilities remains largely

superficial. The individual resources and backgrounds of migrants are crucial for the conversion of capabilities into functionings-conversion factors according to [Robeyns \(2017\)](#). Integration is a process that enables opportunities and the active shaping of one's own life path. In line with the capability approach ([Nussbaum, 2000, 2011](#); [Sen, 1999](#)), attitudes toward migration represent an assessment of the opportunities and possibilities available to migrants. Individual characteristics and external conditions interact to enable integration as concrete freedom of action.

Whether measures enable migrants to use their rights and capabilities to lead a good, self-determined life depends on factors such as the adaption of VET providers to labor market requirements and individual commitment. They create opportunities and at the same time regulate *vocational self-determination*, whereby action beyond the system requires a willingness to take risks. Sustainable integration into the labor market, neighborhood and society requires relationship building, which is difficult to measure and rarely receives public funding.

The second research interest focused on the question of *how VET providers perceive their own potential of contributing to a sustainable integration of work migrants in Germany and what challenges and opportunities to act they face*. Overall, the VET providers covered by this study showed potential, mostly due to their high level of commitment to their task. The findings pointed to a high individual engagement, which has probably not yet been fully recognized as a valuable resource, for, e.g., quality development. Especially the long-term integration needs individual commitment, but a professional approach would protect educational professionals from excessive personal commitment ([Barreto et al., 2022](#); [Fratzschler and Zinn, 2025](#); [Expert Council for Integration and Migration \[SVR\], 2025](#)). Some interviewees described the active involvement of neighborhood into their work, which represents a potential for active stakeholder management. But this is limited by the authenticity of the promotor. Challenges can appear in relation to the specific conditions of single VET providers. Most of them are affected by recognition procedures, maintenance of networks with employers and the high competition between VET providers themselves.

Social integration and inclusion must be given even greater consideration and expanded, as sustainable participation also requires social networking, recognition in the workplace and social participation that goes beyond purely formal measures ([Barreto et al., 2022](#); [Expert Council for Integration and Migration \[SVR\], 2025](#)). Additional strategies and services are needed to break down social barriers and promote concrete integration into social and vocational communities. There is still a lack of social contacts ([Expert Council for Integration and Migration \[SVR\], 2025](#)). Access and accessibility as conditions, as well as greater social inclusion, also have an impact on social innovation ([Howaldt and Schwarz, 2010](#)), as integration should be viewed holistically.

The study shows that structural support and social integration mechanisms have the potential to enable migrants to realize their capabilities in a sustainable manner and participate in society. This is influenced by social, economic and political conditions, which is why social factors must also be taken into account (see also [Schultz and Mecke, 2024](#)). A beneficial approach integrates migrants' perspectives, labor market needs and the interests of countries of origin.

This research has both formal and content-related *limitations*. In terms of formal limitations, it should be noted that the sample size

is small and limited to the German context. Furthermore, there are restrictions regarding the presentation of perspectives on the subject of the study, as only actors from the destination country were considered. It should be emphasized that the perspective of migrants is needed to talk about the actual realization of capabilities. These results are based solely on the perceptions of providers with regard to migrants. Thus, the interviewees are not representative of Germany as a whole. This means that only a first impression of the current situation in Germany can be drawn. In addition, the inclusion of the migrant perspective would contribute further findings and insights in this regard. With regard to limitations in terms of content, it should be noted that the analytical frame was developed using existing definitions and concepts from the capability approach and integration, meaning that it does not represent a universal analytical framework. Similarly, this study focused on only four capabilities, meaning that it is not possible to conduct a comprehensive analysis of all capabilities in the context of migration.

*Further research* should include the perspectives of migrant workers and other migrant groups to reach a comprehensive understanding of potential capabilities and sustainable integration. Similarly, the focus could be placed on other capabilities that are relevant in the context of migration in order to gain a holistic view of the development and realization of capabilities among labor migrants. In this regard, an analysis of the migrant perspective could provide further insights into the identificative integration dimension and its impact on social innovation, enabling the effects of sustainable integration on society to be examined in terms of social innovation (Howaldt and Schwarz, 2010). Finally, cross-national research designs could focus on specific case studies and use them to identify the potential for capabilities and the conditions for sustainable integration. Similarly, further research could focus on examining the business models of private VET providers and investigating their relevance in the area of sustainable integration. A key focus could be placed on their impact in terms of social innovation and its transfer to society. This would also be examined vice versa in terms of how social innovation in society, e.g., through the reduction of racism, leads to new structures in companies and VET institutions. This means examining how social innovations are changing the integration structures of these institutions, with a focus on social justice beyond the work context. In addition, a humanistic perspective can be adopted with an emphasis on human dignity, as dignity should be placed at the center of migration studies (Perrin, 2025). This would also address the aspect of human rights.

## Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

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## Author contributions

FK: Conceptualization, Writing – review & editing, Writing – original draft, Data curation, Visualization, Formal analysis. IK: Methodology, Writing – review & editing, Visualization, Conceptualization.

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## Conflict of interest

The author(s) declared that this work was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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