



Integration of immigrants into vocational education and training in Europe: A scoping review

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Abstract

Increasing immigrants' labour market participation is an important political goal in many European countries. Vocational education and training (VET) can play a key role in this process. The aim of this scoping review was to review the literature on using VET programmes as a means for immigrants' labour market integration by mapping key characteristics of empirical studies within this research field, and to analyse challenges reported in the literature. We conducted systematic searches in three international indexed databases and supplementary searches in alternative sources. In total, 20 studies (published 2013–2023) were included. Our findings suggest that research on immigrants and VET has slightly increased during the ten-year period we mapped. The studies are predominantly qualitative and originate from the Nordic and German-speaking countries, with refugees and teachers as the main research participants. Through thematic analysis, we identified two broad and interrelated themes of barriers to integration in VET programmes: institutional challenges and situational challenges. Institutional challenges were further categorised into the sub-themes of information, access, course provision, and organisational challenges. Situational challenges include newcomer factors, reception factors, immigration policies, and integration policies. These findings highlight the complexity of immigrants' learning trajectories in VET, shaped by the interplay of multiple challenges within diverse local and national contexts.

Keywords: vocational education and training (VET), refugees, immigrants, integration, preparatory VET programmes



Introduction

Across Europe, education and training are emphasised as key policy measures for achieving socio-economic integration (European Commission, 2020), with access to and participation in education and the labour market being identified as important outcomes (Penninx & Garcés-Masareñas, 2016). In the context of integration policies targeting newly arrived immigrants, these measures are often framed within a 'train-first' approach, referring to long-term investment in developing individuals' skills (Arendt & Bolvig, 2020). Studies suggest that this approach is effective. Obtaining formal qualifications in the country of settlement – such as completing upper secondary education – can increase young refugees' participation in the labour market (Manhica et al., 2019). Likewise, it has been found that immigrants in Germany benefit from occupational-specific education and training, which enhances their access to the labour market (Geven & Spörlein, 2023).

One way of obtaining a formal qualification is through vocational education and training (VET). Both the EU and OECD regard VET as a powerful integration tool to secure newly arrived immigrants' stable labour market participation (European Commission, 2020; Jeon, 2019). Thus, several countries have developed policy measures that target this group's entry into VET. For example, in Switzerland, national authorities decided to use the VET system to facilitate refugees' integration into the labour market, and in 2018, a pre-apprenticeship programme was introduced (Aerne & Bonoli, 2023) with promising results for obtaining a subsequent regular apprenticeship (Stalder et al., 2023). Refugee apprenticeship programmes have also proven to offer effective transitions to employment in Denmark (Jørgensen, 2022).

The promising outcomes of these initiatives raise interesting broader questions about understanding how VET can serve as a means for integrating newly arrived immigrants into the labour market (Moreno Herrera et al., 2022). This growing interest is mirrored in an expanding body of research, spread across several disciplines and fields. To our knowledge, no scoping review and systematic analysis have addressed immigrants' participation in VET. Such a review can summarise central findings thus far and point to research gaps to enhance our understanding. There has been a call for more systematic syntheses drawing on an explicitly stated methodology of retrieving, selecting, and synthesising the relevant body of knowledge in the VET field (Gessler & Siemer, 2020). Therefore, to provide an overview of the literature in this interdisciplinary and dynamically evolving field, we applied a scoping review approach to systematically retrieve and map its breadth and to analyse the main themes. The following research questions are addressed: 1) What are the key characteristics and central topics in the studies we included? 2) What challenges are reported?

To address the first research question, we provide a structured overview of the included studies, mapping study population, geographical focus, topics, and methods used. To answer the second research question, we present a thematic analysis of the challenges the researchers point to in their analysis. Two additional research questions were originally considered, namely, to identify what the findings suggest about the benefits of VET for newly arrived immigrants' labour market integration, and what factors may foster newly arrived migrants' participation and completion of VET. Even though the intention of some of the empirical studies was to investigate benefits and barriers, few have addressed benefits in their findings; hence, we focused on what the literature says about challenges.

In this study, we identified and analysed 20 studies conducted in European countries. While migration is a global phenomenon, we focused on Europe because integration policies, education systems and labour market conditions tend to be more aligned across European countries than across other regions, due to shared legal frameworks and similar socio-political contexts. Our research strategy initially focused on locating VET studies that use the terms 'immigrants', 'refugees' or 'migrants'. Reflecting the literature identified, we adopt the term *newly arrived immigrant* as an overarching term. This term encompasses a range of migration motivations and diverse legal residency statuses. While most of the studies we analysed refer to their study population as *refugees*, some studies that use the broader term *migrants* refer to *refugees*. Moreover, some studies do not explicitly state the migration backgrounds of the students discussed; however, references to countries of origin – like Somalia and Afghanistan – suggest that most students in these studies may be refugees or individuals who have been reunified with refugee family members. When presenting individual study findings, however, we use the terminology applied by the respective authors.

The next paragraph focuses on the benefits and challenges of employing VET as a means for integrating newly arrived immigrants into the workforce. We then go on to describe our analytical perspective and the methods used, including the search protocol and coding procedures. In the results section, the key characteristics and central topics of the included literature are presented, as well as our thematic analysis of challenges. This scoping review ends with a discussion of the findings and reflects on some of the research gaps before its concluding section.

Benefits of VET for labour market integration

While European countries share some general similarities, the role VET can play in integrating newly arrived refugees can vary significantly, because VET systems are structured, organised, and embedded differently in the labour market across countries (Pilz, 2016). In countries where the traditional approach

to vocational training involves a blend of state and company provision – as seen in collective skill formation systems (Busemeyer & Trampusch, 2012) – VET makes significant promises in promoting a smooth transition from school to work (Koehler & Schneider, 2019; Nilsson, 2010) and for facilitating the integration of refugees (Arene & Bonoli, 2023). In collective skill formation systems, shared responsibility of employers, labour organisations, and the state ensures that training – in a dual system both at school and in the company as an apprentice – aligns with labour market needs in a way that benefits both individuals and employers. Individual benefits for newly arrived migrants include acquiring highly relevant technical and practical job skills, alongside opportunities for learning about the settlement countries' formal and informal workplace norms, practices, and expected conduct (Arene & Bonoli, 2023; Jørgensen, 2022). Such dual systems, through which school-based learning is combined with on-the-job training as an apprentice, can, for instance, be found in Germany, Austria, Switzerland, Denmark, and Norway. In contrast, Sweden, Finland, and France are examples of countries that have traditionally employed state-led, school-based VET systems (Pilz, 2016), where work-based learning holds less significance. Although such typologies offer helpful analytical frameworks, it is important to recognise that VET systems are evolving. For instance, recent reforms in Finland have increased the emphasis on work-based and competence-based learning (Rintala & Nokelainen, 2020).

A benefit of most VET systems is that newly arrived immigrants can start to learn vocational skills even with limited proficiency in the language spoken at work (Jørgensen, 2022). Another benefit across countries is that VET certification is recognised by employers in the labour market. Hence, there is a high chance of finding employment that matches the documented skills obtained upon completion (Geven & Spörlein, 2023).

Challenges facing immigrants in VET

In several OECD countries, immigrants' participation in VET is lower than the majority population (Beicht & Walden, 2019; Jeon, 2019), which has been explained by the multiple challenges that many face.

First, some groups of immigrants may have problems fulfilling the pre-requisites for entering VET, due to inadequate formal qualifications, language skills, lack of work experience or insufficient knowledge of the local culture and values (Bredgaard & Thomsen, 2018; Jeon, 2019; Stalder et al., 2023). Such challenges may particularly put pressure on 'late arrivals', that is, young people who arrive in a new country late in their educational trajectory. These young people need to complete school in a short time after arriving in a new country whilst also learning a new language, building new social bonds, and getting acquainted with new cultural norms. Many young recently arrived refugees face

additional challenges because their education has been disrupted or is incomplete due to pre-migration conditions and the flight (Lynnebakke et al., 2020). This disruption also leads to some refugee students entering upper secondary school as young adults to fill in educational gaps. Such delays can entail additional burdens and a sense of urgency to complete one's education, for example if they are young adults who have established their own families.

Refugees have a vast variation in their educational backgrounds and aspirations for further education and work. Some want to complete education and start working as soon as possible. Some have higher education aspirations, but delay pursuing these, which can be due to both being older when entering and completing upper secondary school, as well as wanting to financially support family members in the new country or abroad who can be in dire situations (Joyce et al., 2010; Lynnebakke et al., 2020; Nell-Müller et al., 2021; Oppedal et al., 2017). Hence, for some refugees, VET may be a relevant educational path in the longer or shorter run as they navigate delayed educational trajectories and other complex life challenges.

A second challenge newly arrived migrants may face, regardless of migration background, is related to having insufficient information about the education system and dual training systems. This topic has frequently been addressed in the literature (Beicht & Walden, 2019; Jeon, 2019) as many young people with an immigrant background might be unfamiliar with the benefits and opportunities of the VET system and the value of a vocational qualification on the labour market.

A third barrier for newly arrived immigrants' entry and completion of VET may concern difficulties in securing an apprenticeship or work placement, which can be due to a lack of social networks (Roth & Weißmann, 2022) and/or the presence of ethnic discrimination by employers (Imdorf, 2017). Companies can be highly selective in their choice of apprenticeship candidates (Bonoli & Wilson, 2019). In dual VET systems, an apprenticeship contract is a prerequisite for both accessing VET and progressing to the workplace-based part of the training. Consequently, not obtaining a placement or an apprenticeship can hinder both entry into VET and the transition to the practical company-based training phase of VET.

The relevance and degree of these challenges vary between countries, depending on the structure of the education system and the extent to which the state is willing to intervene in the VET system (Busemeyer & Trampusch, 2012). For example, employers' social engagement can be increased by state interventions such as subsidies (Aerne & Bonoli, 2023) or by establishing preparatory measures that can provide language training and information about the labour market, and connect students to companies – all of which can potentially make the transition to regular VET programmes easier (Jeon, 2019).

Analytical approach

To guide our thematic analysis, we adopted a theoretical approach that is grounded in research on barriers to participation in education. Specifically, we applied Cross's (1981) framework, which categorised such barriers into three main types: *dispositional*, *situational*, and *institutional*. Situational barriers refer to the individual's broad circumstantial conditions; institutional barriers concern institutional conditions; and dispositional barriers concern individual dispositions or motivation to participate in education. Cross (1981) developed this framework to describe barriers faced by adult students in their pursuit of post-secondary education. We found this framework to be relevant for understanding the trajectories of immigrant VET students, because many of these students are (young) adults who balance multiple responsibilities, such as caring for family members and covering living expenses, which set them apart from the typical obligations that younger VET students have.

Moreover, we followed Lambrechts (2020), who has studied refugees' barriers to accessing higher education, in the sense that we shift the focus away from individual traits and 'deficits', and how students adapt to the educational system. This contrasts with theories of labour market integration that emphasise an immigrant's human capital (e.g., Bredgaard & Thomsen, 2018), which tend to focus on individual barriers and enablers of integration. By highlighting situational and institutional barriers, our perspective highlights structural and systemic barriers, thereby addressing how VET can be made more inclusive and flexible and adapt to the resources of students.

Methodological approach

This study applies a scoping review approach – a type of 'review research' (Kunisch et al., 2023) that is suitable for systematically identifying, describing, and examining broad, complex, and dynamically developing research topics with the aim of identifying knowledge gaps (see also Levac et al., 2010; e.g., Tricco et al., 2018). A scoping review usually provides a description of the core characteristics of the identified studies, such as publication year, country of study, and discipline. In addition, it organises the studies into themes and syntheses to address the review question(s). Scoping reviews can also be used to clarify key concepts in the literature (Munn et al., 2018). Given our broad research questions and the high interdisciplinarity of this emergent field, we deemed the scoping review approach well-suited for our study. As we assumed that the number of eligible studies would be limited, we assessed the method to be appropriate for conducting analyses beyond bibliometric metadata, providing thematic analyses and syntheses based on data from full texts (e.g., Campbell et al., 2023). To ensure transparency in our study, we used the Preferred Reporting

Items for Systematic Reviews and Meta-analysis for Scoping Reviews (PRISMA-ScR) Checklist (Tricco et al., 2018).

Search strategy and eligibility criteria

The review includes empirical studies on the participation of immigrants in VET in Europe, published between 2013–2023. We focused on studies published in English, including immigrant students who either qualified for or participated in VET. Both peer-reviewed journal articles and edited book chapters were considered. Studies with insufficient information in the abstract were excluded. The search strategy was informed by inclusion and exclusion (eligible) criteria drawing on the *Population–concept–context* framework recommended by the Joanna Briggs Institute for scoping reviews (The Joanna Briggs Institute, 2015). Table 1 outlines the eligibility criteria.

Table 1. Eligible criteria.

Category	Inclusion criteria	Exclusion criteria
P–population (Who?)	Immigrants qualifying for and participating in VET	Non-immigrants Children of immigrants ('second generation' immigrants) Labour
C–concept (What?)	Vocational education and training, including apprenticeship	Non-structural measures Higher education
C–context (With what qualifiers?)	Education for labour market integration	Higher vocational education Other forms of integration
Time span	2013–2023	Before 2013
Publication status	Peer-reviewed journal articles Edited book chapters	Other types of scholarly publication
Language	English	Languages other than English
Design	Empirical studies	Theoretical papers
Country of origin	European countries	Non-European countries

Following a protocol that is openly accessible (Wollscheid et al., 2023), we applied systematic searches in three internationally indexed databases: Web of Science (WoS) and Scopus (both with a general focus) and Education Source (disciplinary focus). The main searches and strategic searches were conducted in August 2023 for the first two databases and in October 2023 for the third database. Table 2 lists the initial search terms. Table 3 presents the search strings that were tested and revised, tailored for each of the three databases.

Table 2. Search terms.

C-concept	P-population	C-context
Vocational education and training	Immigrant*	Integration
Vocational education	Refugee*	Inclusion
Vocational training	Migrant*	
TVET		
VET		
Apprenticeship*		

Table 3. Search Strings.

Search string 1	Vocational education and training OR vocational education OR vocational training OR VET OR TVET OR apprenticeship*
Search string 2	Immigrant* OR refugee* OR migrant*
Search string 3	Integration OR inclusion
Search string 4	1 AND 2 AND 3

In international indexed databases such as WoS and Scopus, there is relatively lower coverage of publications in the social sciences and humanities than in other disciplines (see Aksnes & Sivertsen, 2019; Heck et al., 2024; Wilder & Walters, 2021). To address this limitation, we applied a combination of citation checks of all publications and reference list checks of core publications (thematically highly relevant publications; additionally identified papers). Such supplementary searches are a common practice in systematic reviews in the social sciences (Papaioannou et al., 2010), and generated eight studies for inclusion. As a result of the initial and supplementary searches, we identified 17 peer-reviewed journal articles and three book chapters. Figure 1 provides the identification and selection process (PRISMA-ScR-diagram).

For the screening, we imported all references (without duplicates) from our searches in the databases into Covidence, a web-based systematic review software. The first and second author were involved in the screening process. For pilot testing and validation of the first screening process, the titles and abstracts of 20 references were screened by the first and second authors independently of each other. Consensus mismatches were resolved by discussion and in cases of uncertainty, the full text was retrieved. After that, the remaining references were screened by the first author. Uncertain cases were discussed between the first and second authors until consensus was reached. The screening process was informed by the eligibility criteria, which were revised after the validation phase. Twenty studies were deemed eligible for inclusion, and these are marked with an asterisk in the reference list.

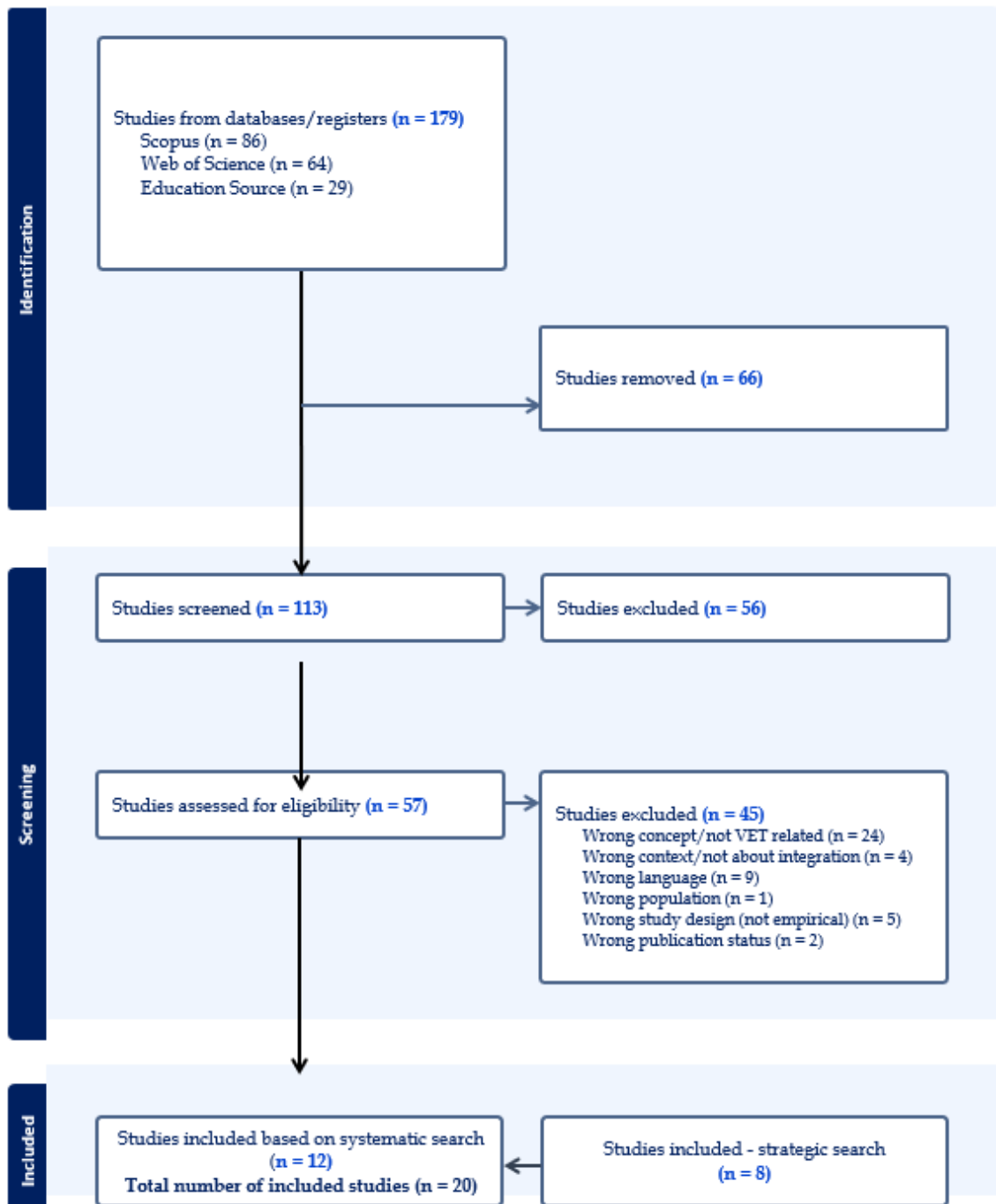


Figure 1. PRISMA Flow Chart.

Coding procedure and analytical framework

The 20 studies were analysed according to a coding scheme designed for this review. Relevant codes comprised descriptive study information such as the

studies' authors, publication year, geography (place of study), purpose, study population, research design, main findings, and conclusions. Further analyses comprised the extraction of central topics and identification of research gaps and implications for further research.

To address the second research question, we prepared for analysis by extracting information from findings judged to be relevant to the research question. The first author was mainly responsible for this process. Extracted data were stored and analysed in a Word document. The coding procedure followed a thematic approach (Braun & Clarke, 2006) and in the first phase involved one reviewer (first author) who independently analysed and coded the extracted data. Thereafter, the third author participated in the coding process in the same document as the first author. The coding process and initial themes were discussed, and the two reviewers refined these to agree on a final set of themes. Emerging themes were discussed with the second author.

Results

Below, we present the results in line with our research questions: 1) *What are the key characteristics and central topics of the studies we included*, and 2) *What challenges are reported?*

Key characteristics in the included articles

In the following, we describe the studies according to characteristics such as publication status and year, country of origin, VET context, research design, and participants.

The review included 17 journal articles and three book chapters. Most of the articles were published in journals in the field of VET research. The three book chapters were published in books that explored migration in relation to education (including the role of VET), employment, and asylum. During the period spanning from 2013 to 2018, there was a notable scarcity of published studies concerning VET and immigrants (N=2). However, an upward trend can be observed in 2022 and 2023, with more than half of the studies (N=11) emerging during those two years. This trend may be attributed to the significant influx of immigrants and asylum seekers in several European countries in 2015/2016, as research on planning, implementing and evaluating educational measures, as well as the scientific publication process, usually takes considerable time. Of the studies published after 2015, 16 out of 18 framed the need for more research within the context of increased refugee immigration.

The studies reported research undertaken in nine countries: Germany (7 studies), Sweden (3), Switzerland (2), Austria (2), Finland (2), and Denmark (1). In addition, three studies were comparative, including the countries Sweden and

Australia (1), Austria, Denmark, and Germany (1), as well as the UK, Germany, Romania, Italy, and Denmark (1).

Qualitative research designs were used in most of the included studies (17). Two studies that evaluated pre-vocational preparatory classes used a mixed-methods design (Reinke & Goller, 2022; Stalder et al., 2023). Only one study used a quantitative design, namely a longitudinal survey study design (Maue et al., 2021).

Examining the study context, we found that many studies (12) explored VET programmes at the regular upper secondary school level, focusing either on the school-based part (6), the work-based part (3), or both (3). Six studies examined pre-vocational preparatory classes that aimed to improve refugee students' transition to regular VET. Lastly, two studies investigated VET at the national system level, comprising two comparative studies that mainly explored barriers in VET policy for accessing VET.

The studies addressed various population groups, with most incorporating the perspectives of students and teachers. Ten studies explored students' experiences of participating in VET. Among those that explicitly reported the number of included students, sample sizes ranged from two to 33 students for the qualitative studies, and from 333 to 432 students for studies using survey or register data (see Table 4). On average, about 70 per cent of the research participants are men, probably reflecting that most of the refugees are male and that courses in general were male-dominated (Chadderton & Edmonds, 2015; Jørgensen et al., 2021). Interestingly, all but one study that involved students as research participants originate from German-speaking countries. The only study from the Nordic countries included two students (Mustonen & Strömmer, 2022), thus likely illustrating scarce research evidence published in English from the voices of newly arrived refugees in VET in these countries.

In contrast, five of the nine studies that examined teachers' viewpoints and experiences were conducted in the Nordic countries. Within the studies that explicitly stated the number of participating teachers, the number varied from 4 to 11 for the qualitative studies, and a survey study included 38 teachers. Additionally, two studies incorporated perspectives from school leadership or school authorities alongside teachers responsible for pre-vocational classes for refugees.

Table 4. Overview of studies including students as research participants.

Study (first author, year, country)	Number of participants	Sex	Age	Nationality
Stadler (2023) Switzerland	432 refugees	60.5% men	M: 26.4 years (target 16–35)	-
Maue (2021) Germany	333 refugees	82% men	15–30 (M: 18.7 years)	Syria, Afghanistan, Iraq, Eritrea, Gambia
Rusert (2023) Germany	33 refugees or immigrants	31 men 2 women	17–38	Afghanistan, Albania, Bulgaria, Gambia, Iraq, Kosovo, Mali, Pakistan, Palestine, Romania, Syria
Fontanari (2022) Germany	30 refugees	-	-	Various Sub-Saharan countries
Verwiebe (2019) Austria	26 refugees	20 men 6 women	18–40	Afghanistan, Syria, Iraq
Wehking (2023) Germany	23 refugees	18 men 5 women	18–40	Afghanistan Syria, Iraq, Mali, Gambia, Somalia, Suda, Saudi Arabia
James (2020) Germany	22 refugees	20 men 2 women	19–25	Afghanistan, Eritrea, India, Somalia, Syria
Ortlieb (2022) Austria	6 refugees	6 men	15–29	Afghanistan, Iran
Mustonen (2022) Finland	2 migrants	2 men	-	Somalia, Afghanistan
Glorius (2020) Germany	Refugees (no N mentioned)	-	14–17	Mainly from Afghanistan, Eritrea, Syria, Kosovo

The perspectives of working life representatives, such as employers, colleagues, or instructors, were part of the data in three studies. Finally, two studies included other actors like activists, social workers, lawyers supporting refugees, refugee charities, researchers, and stakeholders. The articles that used the term ‘stakeholders’ referred to employees in vocational schools, non-governmental organisations, and labour market organisations (Jørgensen, 2022) as well as national VET and migration authorities, regional VET authorities, and professional training organisations (Aerne & Bonoli, 2023).

Central topics of the included studies

We grouped the central topics of the studies into four categories: (1) students’ learning and integration, (2) teachers’ practices and perceptions, (3) programme establishment, development, and evaluation, and (4) benefits and barriers of using VET as an integration tool at state level.

Students' learning processes and integration through VET

Seven studies addressed *students'* learning processes and integration through VET. These studies focused on several topics, including how students' legal status can impact their learning process in VET (Fontanari, 2022; Wehking, 2023); how translanguaging practices support students' learning (Mustonen & Strömmer, 2022); and students' experiences of their training or social learning environment in either the vocational schools (Rusert & Stein, 2023), in the workplace (Ortlieb & Ressi, 2022; Verwiebe et al., 2019), or in both settings (Stalder et al., 2023).

Teachers' practices and perceptions

Teachers' practices and perceptions are discussed in five studies. These encompassed investigations into understanding VET teachers' practices to support language learning in school-based VET (Paul, 2023) and the integration of learning within the dual system, both at school and work (Choy & Wärvik, 2019). Additionally, attention was given to the development of teaching practices for immigrants (Henning Loeb, 2020), as well as teachers' perceptions of diversity (Itkonen et al., 2015). Furthermore, insights were gained into teachers' perceptions of their students' situation inside and outside school (Asghari & Abraham, 2022).

Programme establishment, development, and evaluation

Concerning programme establishment, development, and evaluation, all five studies in this category investigated different aspects of newly established preparatory programmes designed to transition refugees into regular VET in Germany and Switzerland. Two studies evaluated the local implementation process in Germany (Glorius & Schondelmayer, 2020; James et al., 2020). The three other studies took a more exploratory approach. In Switzerland, Aerne and Bonoli (2023) addressed the organisational and coordination challenges involved in the decision-making process at the federal and regional levels for establishing a new national pre-vocational programme. Maue et al. (2021) analysed transitions from prevocational preparation classes to regular VET. Finally, Reinke and Goller (2022) explored challenges encountered in implementing and developing a preparatory programme.

Benefits and barriers of using VET as an integration tool at state level

Three studies aimed to investigate the benefits and barriers of using VET as a tool for labour market integration by looking at state-level policies and organisation of VET. This group of studies includes two cross-European studies (Chadderton & Edmonds, 2015; Jørgensen et al., 2021) and one study that focuses on the role of apprenticeships for integrating immigrants in Denmark (Jørgensen, 2022).

Reported challenges

We conducted a thematic analysis to categorise what the studies report about challenges of using VET as a means for supporting immigrants' integration into education and the labour market. The themes were organised into two overarching categories – *institutional challenges* and *situational challenges* – each comprising four and three sub-themes respectively, aligned with our analytical framework (see Table 5).

Institutional challenges

The first overarching theme, institutional challenges, comprises four sub-themes: *information*, *access*, *course provision*, and *organisation*. Among these sub-themes, information was addressed the least in the studies. Four studies identified informational challenges that newly arrived immigrants face, particularly difficulties in understanding the educational system in the new country before entering VET (Chadderton & Edmonds, 2015; Jørgensen et al., 2021; Reinke & Goller, 2022) and during a preparatory VET programme (James et al., 2020).

The studies on *access-related challenges* concern entrance requirements in VET that make it difficult for immigrants to attend. Chadderton and Edmonds (2015) described an inflexible and highly regulated VET system in Germany, Denmark, Romania, and Italy, which makes it difficult for refugees to enter. Jørgensen et al. (2021) pointed to the same challenge. However, this study to a greater extent related access problems to individual factors, that is, refugees' language skills, incomplete basic education, as well as their reduced chances of obtaining an apprenticeship contract. Other studies also addressed the latter. For example, one study found that teachers could take on a mediating role in supporting refugee students' access to informal social networks in which apprenticeships are distributed, but that they might not feel responsible for this work (Glorius & Schondelmayer, 2020). Studies also indicated that teachers might struggle to find work placements for their students due to employers' perceptions of the assumed cultural or language barriers refugees face (Henning Loeb, 2020; Jørgensen et al., 2021). Another access-related finding concerns challenges with accrediting refugees' prior education due to lack of documentation or devaluation by authorities. This can make re-education necessary (Chadderton & Edmonds, 2015; Jørgensen et al., 2021). As noted in the introduction, this finding is well-established in the research literature, and several European countries have developed systems for skills assessment and recognition of refugees' prior qualifications (Jeon, 2019).

Challenges concerning *course provision* of VET to immigrants is a broad sub-theme, and aspects of inadequate course provision are discussed in 13 studies. This sub-theme relates to different pedagogical challenges at the organisational (meso) and individual/class (micro) levels. Meso-level challenges concern

Table 5. Overview of thematic categories for research question 2: Which challenges are reported?

Primary theme	Sub-themes	No. studies	Reference
1) Institutional challenges	Information	4	Chadderton & Edmonds (2015), Jørgensen et al. (2021), James et al. (2020), Reinke & Goller (2022)
	Access	6	Chadderton & Edmonds (2015), Glorius & Schondelmayer (2020), Henning Loeb (2020), Jørgensen et al. (2021), Jørgensen (2022), Verwiebe et al. (2019)
	Course provision (curriculum, language training, time constraints, student heterogeneity, teacher-student relations, teacher practices and perceptions)	13	Chadderton & Edmonds (2015), Choy & Wärvik (2015), Glorius & Schondelmayer (2020), Henning Loeb (2020), Iktonen et al. (2015), James et al. (2020), Jørgensen et al. (2021), Mustonen & Strömmer (2022), Ortlieb & Ressi (2022), Paul (2023), Reinke & Goller (2022), Rusert & Stein (2023), Wehking (2023)
	Organisation	7	Aerne & Bonoli (2023), Chadderton & Edmonds (2015), Glorius & Schondelmayer (2020), Hennig Loeb (2020), Jørgensen (2022), Paul (2023), Stadler et al. (2023)
2) Situational challenges	Newcomer factors (cultural integration and cultural differences, language skills)	9	Henning Loeb (2020), Itkonen et al. (2015), James et al. (2020), Jørgensen et al. (2021), Maue et al. (2021), Ortlieb & Ressi (2022), Reinke & Goller (2022), Rusert & Stein (2023), Wehking (2023)
	Reception factors (discrimination and racism, social integration, students' economic situation)	12	Asghari & Abraham (2023), Chadderton & Edmonds (2015), Fontanari (2022), Glorius & Schondelmayer (2020), Henning Loeb (2020), James et al. (2020), Jørgensen (2022), Jørgensen et al. (2021), Maue et al. (2021), Rusert & Stein (2023), Verwiebe et al. (2019), Wehking (2023)
	Immigration and integration policies	8	Asghari & Abraham (2023), Chadderton & Edmonds (2015), Fontanari (2022), Glorius & Schondelmayer (2020), Ortlieb & Ressi (2022), Paul (2023), Reinke & Goller (2022), Wehking (2023)

criticism of the curriculum, reported mainly from pre-VET programmes in Germany, where students or teachers expressed a need for additional subjects (like mathematics) (Glorius & Schondelmayer, 2020; James et al., 2020; Reinke & Goller, 2022). Other studies addressed challenges related to (a low) availability of language training within VET programmes. Newly arrived immigrant VET students might need supplementary language training, both before and during a

VET programme, but this provision varied and did not exist in all the countries examined in these studies (Chadderton & Edmonds, 2015; Jørgensen et al., 2021). Furthermore, in a study from Germany, James et al. (2020) found that there is a lack of attention to students' heterogeneous language levels and an insufficient focus on grammar and specialised vocational vocabulary during the programme. From Sweden and Finland, studies indicated that VET teachers may vary in how they view their own role in supporting newly arrived migrants' language learning (Henning Loeb, 2020; Mustonen & Strömmer, 2022; Paul, 2023). One study found that some teachers expressed a willingness to develop relevant skills and to extend beyond everyday practices to meet specific needs of immigrant students (Henning Loeb, 2020), whilst another study found that VET teachers expressed frustration and dissatisfaction about being cast in a 'language teacher' role (Paul, 2023).

Critiques of curriculum and language training provision often relate to teachers' perceptions of the limited time available to achieve a sufficient level of vocational and language skills (Choy & Wärvik, 2019; James et al., 2020; Paul, 2023; Reinke & Goller, 2022). For example, a study found that teachers expressed concern that students' language proficiency at the end of pre-vocational programmes might be insufficient for transitioning into ordinary VET (Reinke & Goller, 2022). Programme duration varied across countries and types of VET programmes. Yet, findings from different contexts indicate that teachers and trainers often found course lengths far too short to prepare students for passing advanced-level courses (Paul, 2023), getting familiar with company work culture and practices (Ortlieb & Ressi, 2022), and developing the language skills that are required for transitioning into ordinary VET or finding employment (Reinke & Goller, 2022). James et al. (2020) and Wehking (2023) noted that students sometimes attended additional language classes outside the VET programme, adding to their time pressure.

The final sub-theme under institutional challenges is *organisational barriers*. Chadderton and Edmonds (2015) highlighted some evidence for insufficient contact between organisations that work with refugee issues and those providing education and training in the countries examined in their study. Meanwhile, a study from Switzerland identified coordination challenges between national immigration authorities, authorities responsible for VET, and private actors involved in VET provision, when these actors tried to establish a new pre-VET-programme (Aerne & Bonoli, 2023). However, this study also revealed that several coordination barriers were overcome and that the programme was regarded as a success, mainly due to the flexible implementation, a generous subsidy, and active participation of employers who saw a clear interest in participating (Aerne & Bonoli, 2023; Stalder et al., 2023).

At the school level, organisational barriers were reported mainly from teachers. These barriers were observed in the Swedish studies and include collaboration problems between language teachers and vocational teachers (Paul, 2023), and a lack of resources allocated to classes for recently arrived migrants, due to low priority by school leaders and municipal educational authorities (Henning Loeb, 2020).

Situational challenges

The second overarching theme pertains to *situational challenges*. Following Lambrechts (2020), we conceptualise these as barriers relating to the broad individual circumstances encountered by newly arrived immigrants. We have categorised the sub-themes of this topic into *newcomer factors*, *reception factors*, and *immigration and integration policies*.

Newcomer factors addressed in the studies concern challenges with cultural differences, cultural integration¹ and language skills. Five of these studies described challenges that immigrants faced in adjusting to a new culture in the workplace or school environment (Itkonen et al., 2015; James et al., 2020; Ortlieb & Ressi, 2022; Reinke & Goller, 2022; Rusert & Stein, 2023). Some studies found that divergent norms and values between teachers and students could lead to misunderstandings and negative feedback for certain behaviours, such as, for example, punctuality (James et al., 2020; Ortlieb & Ressi, 2022; Reinke & Goller, 2022). In Finland, Itkonen et al. (2015) found that many teachers relied on stereotypical assumptions about the behaviour of people from certain countries or regions to explain students' educational achievements or lack thereof.

Meanwhile, in a study from Germany, Rusert and Stein (2023) observed challenges related to being used to a different school culture than in the settlement country. Rusert and Stein state that in Germany, lessons promote critical skills, as well as creative and reflective skills, whereas lessons in the refugees' countries of origin were more oriented towards factual knowledge.

Concerning language-related challenges, studies about immigrant students found that a lower level of proficiency in the settlement country language caused stress and difficulties in students' learning situation (Rusert & Stein, 2023; Wehking, 2023) and challenges with transitioning into regular VET and employment (Maue et al., 2021; Reinke & Goller, 2022). In these studies, insufficient language skills were identified as one of the greatest barriers to achieving success in pre-VET or in the school-based part of VET (relating to passing exams).

Reception factors refer to migrants' broader settlement context beyond educational institutions. Most of the 12 studies that address this topic concern refugee students. These studies found that perceived discrimination and racism as well as challenges with social integration hindered refugee students' ability to interact with native peers. For example, research from Germany found that

refugee students experienced both subtle and overt discrimination, sometimes in the form of 'jokes' and devaluation by other students and teachers at school (Rusert & Stein, 2023), and by colleagues and employers in the workplace during apprenticeships (Wehking, 2023). In Sweden, a study found that employers' xenophobic views made it difficult to find work placements for students (Henning Loeb, 2020). Discrimination can be an obstacle to social integration. However, other difficulties related to social integration were more (often) explicitly addressed in the studies. Some studies found that students who attended separate classes for newcomers expressed a desire for more contact with native peers (Glorius & Schondelmayer, 2020; James et al., 2020). Interestingly, Maue et al. (2021) observed a positive correlation between having contact with Germans helping young refugee students and the likelihood of these students entering a regular educational pathway. However, also in the German context, Glorius and Schondelmayer (2020) and James et al. (2020) found that teachers and school authorities did not perceive an obligation to facilitate the integration of refugee students with German students at school.

Concerning economic barriers, some studies from Denmark and Germany highlighted the issue of low wages received by students during both pre-apprenticeship and regular apprenticeship periods, identifying this as a barrier to completing VET programmes (Jørgensen, 2022; Jørgensen et al., 2021; Verwiebe et al., 2019). Jørgensen (2022) observed that in Denmark, partial completion of a VET programme could be seen as a 'positive drop-out' if it led to employment, for instance when bus drivers who obtain a driving license during school-based VET secure relevant jobs (Jørgensen, 2022). Fontanari (2022) noted that apprenticeship contracts in the low-paid sectors could negatively affect students' ability to achieve self-sufficiency.

The eight studies that addressed the sub-theme of immigration and integration policies concerned the impact of legal restrictions on VET students' learning (Fontanari, 2022; Ortlieb & Ressi, 2022; Reinke & Goller, 2022; Wehking, 2023) and reported that such policies can constrain migrants' educational/vocational choices (Chadderton & Edmonds, 2015; Fontanari, 2022; Wehking, 2023). Some studies reported that VET students' unclear residence status may negatively impact learning and social inclusion as students feared deportation (Asghari & Abraham, 2022; Glorius & Schondelmayer, 2020; Reinke & Goller, 2022). Chadderton and Edmond (2015) underscored that dispersal policies could provide immigrants with housing, but limited their access to jobs and training, because immigrants in several countries tended to be housed in municipalities with few work opportunities. Two studies addressed consequences of a German law that states that rejected asylum-seekers could be granted residency if they completed three years of vocational training followed by two years of related work. These two studies discussed challenges of students' social mobility, as it is

impossible to pursue alternative qualification paths and a change of vocational training is only allowed once within this regulation (Fontanari, 2022; Wehking, 2023). As the available apprenticeship contracts were usually located in the low-paid sector (Fontanari, 2022), inclusion of former asylum seekers in the labour market via this route seemed to be narrowed to a few vocational sectors.

Discussion

The purpose of this review was twofold: to map peer-reviewed research from the last decade (2013–2023) in the European context, and to identify challenges in using VET programmes as a means for integrating newly arrived immigrants into the labour market. We have considered the characteristics and central topics of the included studies and thematically analysed the challenges they report. In this section, we discuss some of the possible implications of the findings and point to some gaps within this growing field of research.

In recent years, immigrants' educational and labour market integration through VET has been on the political agenda in several European countries. Our scoping review indicates that this growing political attention has been followed by a relatively small number of published research studies. As of 2023, our research strategy identified 20 studies published between 2013 and 2023 as eligible. Moreover, we have identified an increase in publications after 2022. This may suggest a lag in the production and publication of empirical research on what can be considered a highly relevant policy issue in some European countries, particularly in the light of increased refugee arrivals following 2015, with more peer-reviewed studies expected to follow.

The limited number of European countries in which the studies were conducted may also suggest that VET is not consistently regarded by policy makers as an effective means of integrating newly arrived immigrants across all European countries and hence may not be a central strategy in many countries. In an analysis of labour market integration policies for refugees in Denmark, Sweden, the Netherlands, and Germany from 2015 onwards, Ravn et al. (2022) show that Denmark and the Netherlands prioritised policies that aim to facilitate recently arrived refugees' early labour market entry. In contrast, Sweden and Germany have to a greater extent emphasised 'train-first' educational activities to promote refugees' long-term employment, which may also be reflected in the relatively higher number of included publications in the review from these two countries. Specifically, in Germany, official policy discourages pushing immigrants into the first available job. Instead, the focus is on creating conditions in favour of finding sustainable employment. The trajectory outlined in Germany was a language learning course, and subsequently, a trial period with competency assessment and familiarisation with potential occupations, then

entry into the labour market, with the option of vocational training (Schwenken, 2021). The research on pre-vocational training programmes in Germany included in this review (Maue et al., 2021; Rusert & Stein, 2023), can be seen as part of this broader approach of emphasising education and training. That said, the limited geographical spread of studies may also reflect other issues, such as the language of publication – an issue we address in the limitations section.

In the thematic analysis, we adopted a theoretical approach that moves the focus away from attributing barriers to entry or participation in VET to individual characteristics (Cross, 1981; Lambrechts, 2020). Following Lambrechts (2020), we argue that it is problematic to frame these challenges as individual ‘deficits’ and thereby placing the responsibility for overcoming them on individuals, as this overlooks the significant influence of structural issues.

The theme of *institutional challenges* emphasises the need to address barriers at the institutional level, to make VET programmes more inclusive, flexible, and better adapted to the resources and needs of newly arrived immigrant students. We categorised the sub-themes in this category to concern *information*, *access*, *course provision*, and *organisation*. While challenges related to information and access are frequently addressed in the context of increasing immigrants’ participation in VET (Beicht & Walden, 2019; Jeon, 2019), this review highlights that the provision and organisation of VET programmes may also present important challenges, primarily concerning the local context of single programmes, but also extending to regional and national policy implementation. Prominent issues include inadequate curriculum and language training, and insufficient time to prepare students to meet expected skill levels. While it is difficult to determine to which extent these issues may stem from start-up difficulties of new programmes, this is likely a contributing factor in some of the studies concerning pre-VET programmes. In the German context, Schwenken (2021) highlights a shortage of qualified language teachers and inconsistent course quality, partly due to new providers entering the field after 2015. In contrast, research on two pre-apprenticeship programmes from Switzerland and Denmark (Aerne & Bonoli, 2023; Jørgensen, 2022; Stalder et al., 2023), included in the review, describes these programmes as highly successful, attributing their success to strong commitment and cooperation from state, regional, and private actors. Jointly, these actors took responsibility for developing and implementing new programmes that were adapted to refugees’ needs, whilst also being beneficial for participating companies in need of workers. However, it should be noted here that the students in the Swiss study comprise a subset of recently arrived students, as they had passed the initial language requirements and stayed in the programme to the end (Stalder et al., 2023).

In the VET research literature, as also reported in studies in this review, it is well known that insufficient language skills represent a significant barrier to

vocational achievement (Jeon, 2019). For example, research by Maue et al. (2021) on the transition from prevocational classes to regular VET classes in Germany concludes that German language skills are more critical than any other known factors in influencing educational transitions. In our analytical framework, insufficient language skills are categorised as a part of *newcomer factors* within the overarching theme of *situational challenges*, alongside challenges related to *reception factors* and *immigration and integration policies*. The factors within the latter sub-themes – such as legal restrictions, low wages, limited occupational choice, and dispersal policies – represent structural challenges that can have a strong impact on access possibilities, learning outcomes and completion rates for recently arrived immigrants in VET, which does not seem to be widely recognised in the research field. For instance, limitations imposed by uncertain residency status or restricted vocational pathways may foster insecurity and limit refugees' career choices and opportunities for advancement (Wehking, 2023).

We saw in some German studies that fears of deportation can negatively affect learning (Fontanari, 2022; Glorius & Schondelmayer, 2020; Reinke & Goller, 2022). Also, other situational barriers recently arrived immigrants face can be associated with stress, which again may affect learning and well-being inside and outside the learning situation. Hence, such situational factors can, in the short and long run, negatively affect students' integration in education and working life. Outside the research field of immigrants' VET participation, it has been broadly established that well-being and mental health can impact educational achievements (e.g., Mælan et al., 2018) and that teachers, school counsellors and other school staff can contribute to students' resilience and mastery in the face of stressors (Masten et al., 2008; see also Mælan et al., 2019).

Research gaps

Chadderton and Edmonds (2015) describe a lack of European research on refugees' access to and experience of VET, particularly regarding structural and institutional barriers to participation, as opposed to individual barriers. Our review has shown that since 2015, a growing number of the included studies have begun to address this gap, especially in German-speaking countries (Germany, Switzerland, and Austria) and some Nordic countries (Sweden, Denmark, and Finland). A comparative perspective is also provided by Jørgensen et al. (2020), who explore similarities and differences in access to and completion of VET for refugees in Austria, Germany, and Denmark. However, based on our analysis of the included studies, we have identified several areas where there is a need for more research.

First, most of the identified research is about refugees while there is little knowledge on other recently arrived migrants' participation in VET. This is unfortunate, given the high level of mobility of labour migrants and their

children in Europe. Second, there is a lack of research about the experiences and perspectives of employers and instructors who oversee the training of apprentices in working life in dual VET. A third research gap concerns teachers' practices and perceptions of teaching and training newly arrived refugees and other immigrant students. Only a few of the identified studies addressed this topic. For instance, there is limited knowledge about how VET teachers approach the teaching of second language learners (Henning Loeb, 2020; Paul, 2023), and about how they address diversity and interculturality in their classrooms (Itkonen et al., 2015). Also, little research has addressed how immigrants' existing knowledge can be supported and acknowledged in VET (Mustonen & Strömmer, 2022). Some studies pointed to the challenges that may arise due to cultural differences between teachers and students and highlighted the heterogeneity of recently arrived students. We need more knowledge about how VET teachers approach such challenges and in which ways their views on diversity inform their practices. Moreover, some studies from Germany and Switzerland address pre-vocational courses, but there is also a lack of studies about teachers' and other training instructors' experiences of such courses (Reinke & Goller, 2022).

As noted in the introduction, different European countries have different VET systems. In addition, labour market needs, educational policies, immigration policies, and reception atmospheres may differ. Comparative studies between and within countries would be beneficial for highlighting similarities and differences across different institutional and policy contexts. Moreover, there is a need for quantitative research to learn more about the prevalence of certain phenomena within and across different local and national contexts. For example, there is a need for quantitatively mapping of which educational provisions have the highest completion rates and the challenges and positive aspects teachers and students encounter in different types of course provisions. In this way, both success factors and barriers that may interact with different contexts can be identified.

Finally, longitudinal research – particularly from students' perspectives – would be beneficial. Through this, we may gain insight into how barriers may accumulate over time and obtain knowledge about experiences and outcomes during critical transitions into and through VET pathways.

Limitations

Our method was informed by a scoping review approach to examine and describe a broad and dynamically developing field and to identify knowledge gaps and clarify core concepts (Tricco et al., 2018). Even though this systematic approach aimed to reduce bias and increase transparency and rigour, it entailed some limitations in terms of time and resources. First, for the data collection, we selected two internationally indexed databases, WoS and Scopus. Both databases

are considered to have limited coverage of publications in the social sciences and humanities, and other research outlets such as books and publications in languages other than English (Aksnes & Sivertsen, 2019). To partly address this limitation, we used a third database, Education Source.

In general, the literature in this field can be described as fragmented and interdisciplinary, and relevant literature, such as research reports, can be published in other channels than peer-reviewed journals. These research publications could provide valuable insights complementing the peer-reviewed studies, especially in countries where such reports are commonly published in non-English languages. For example, in Norway, which is not represented in this review, several research reports have been published in Norwegian on the topic of developing different VET models that accommodate immigrants' needs (Hellang & Espegren, 2022; Høst & Reymert, 2017; Kindt et al., 2024; Leirvik & Staver, 2019). In summary, an important limitation of our study is that our sample was restricted to English-language publications, mainly peer-reviewed journal articles. To address some of these limitations, we used supplementary searches, comprising backward and forward snowballing. These are typical strategic search strategies used in systematic reviews in the social sciences.

Finally, this review covers studies published up to 2023 and thus, excludes newer studies published at a later stage. This is a common limitation of review studies that rely on secondary data, as they may not reflect the most recent developments when published. However, future review studies may expand the search period and build upon this review's findings.

Concluding remarks

This scoping review has mapped the available research on the use of VET programmes as a means for integrating newly arrived immigrants into the labour market. While integration policies vary across countries regarding the role of education and training in securing labour market participation for immigrants, VET programmes have the potential to facilitate this transition. However, our findings highlight numerous institutional and situational challenges that immigrant students who pursue a VET pathway may encounter. These challenges are shaped by diverse local and national contexts, where policies across different domains – education, labour, integration, immigration – strongly influence VET practices. Consequently, these summarised findings should not be generalised to other national contexts, and in some cases not even to other regional contexts in the same country. Institutions that design VET programmes for recently arrived immigrants could, however, consider these challenges for their own context, using the insights presented here to better understand the

wide range of factors that may hinder this underrepresented group and support their successful inclusion in VET.

Endnote

¹ By 'cultural integration' we refer to *knowledge* about common codes and cultural practices in the new context (cf. Heckmann, 2005); the term does not equate assimilation. Meanwhile, challenges with cultural differences can occur regardless of new residents' level of cultural integration.

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References

- *Aerne, A., & Bonoli, G. (2023). Integration through vocational training: Promoting refugees' access to apprenticeships in a collective skill formation system. *Journal of Vocational Education & Training*, 75(3), 419–438. <https://doi.org/10.1080/13636820.2021.1894219>
- Aksnes, D. W., & Sivertsen, G. (2019). A criteria-based assessment of the coverage of Scopus and Web of Science. *Journal of Data and Information Science*, 4(1), 1–21. <https://doi.org/10.2478/jdis-2019-0001>
- Arendt, J. N., & Bolvig, I. (2020). *Early labor market entry, language acquisition and labor market success of refugees* (Working Paper). The Danish Center for Social Science Research.
- *Asghari, H., & Abraham, G. Y. (2022). Newly arrived vocational students' situation in life and at school: Understanding teacher stories through Foucault's power and counter-power. *Scandinavian Journal of Vocations in Development*, 7(1), 103–122. <https://doi.org/10.7577/sjvd.4593>
- Beicht, U., & Walden, G. (2019). Transition to company-based vocational training in Germany by young people from a migrant background: The influence of region of origin and generation status. *International Journal for Research in Vocational Education and Training*, 6(1), 20–45. <https://doi.org/10.13152/IJRVET.6.1.2>
- Bonoli, G., & Wilson, A. (2019). Bringing firms on board: Inclusiveness of the dual apprenticeship systems in Germany, Switzerland and Denmark. *International Journal of Social Welfare*, 28(4), 369–379. <https://doi.org/10.1111/ijsw.12371>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Bredgaard, T., & Thomsen, T. L. (2018). Integration of refugees on the Danish labour market. *Nordic Journal of Working Life Studies*, 8(S4), 7–26. <https://doi.org/10.18291/NJWLS.V8IS4.111161>
- Bussemeyer, M. R., & Trampusch, C. (2012). The comparative political economy of collective skill formation. In M. R. Bussemeyer, & C. Trampusch (Eds.), *The political economy of skill formation* (pp. 3–38). Oxford University Press.
- Campbell, F., Tricco, A. C., Munn, Z., Pollock, D., Saran, A., Sutton, A., White, H., & Khalil, H. (2023). Mapping reviews, scoping reviews, and evidence and gap maps (EGMs): The same but different—the “Big Picture” review family. *Systematic reviews*, 12(1), 45. <https://doi.org/10.1186/s13643-023-02178-5>
- *Chadderton, C., & Edmonds, C. (2015). Refugees and access to vocational education and training across Europe: A case of protection of white privilege? *Journal of Vocational Education & Training*, 67(2), 136–152. <https://doi.org/10.1080/13636820.2014.922114>

- *Choy, S., & Wärvik, G.-B. (2019). Integration of learning for refugee and migrant students: VET teachers' practices through practice theory lens. *Journal of Vocational Education and Training*, 71(1), 87–107.
<https://doi.org/10.1080/13636820.2018.1518921>
- Cross, K. P. (1981). *Adults as learners: Increasing participation and facilitating learning*. Jossey-Bass.
- European Commission. (2020). *Action plan on integration and inclusion 2021–2027*. European Union. <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0758>
- *Fontanari, E. (2022). The neoliberal asylum. The Ausbildungsduhlung in Germany: Rejected asylum-seekers put to work between control and integration. *Sociologica-International Journal For Sociological Debate*, 16(2), 117–147. <https://doi.org/10.6092/issn.1971-8853/12689>
- Gessler, M., & Siemer, C. (2020). Umbrella review: Methodological review of reviews published in peer-reviewed journals with a substantial focus on vocational education and training research. *International Journal for Research in Vocational Education and Training*, 7(1), 91–125.
<https://doi.org/10.13152/IJRVET.7.1.5>
- Geven, S., & Spörlein, C. (2023). Who benefits from school-to-work linkages in the labour market? A comparison between natives, migrants educated abroad, and those educated domestically. *European Sociological Review*, 39(3), 418–432.
<https://doi.org/10.1093/esr/jcac038>
- *Glorius, B., & Schondelmayer, A. C. (2020). Diverging perspectives on “integration” in the vocational education system: Evidence from an East German periphery. In B. Glorius, & J. Doomernik (Eds.), *Geographies of asylum in Europe and the role of European localities* (pp. 179–200) (IMISCOE Research Series). Springer Open., 179–200.
https://doi.org/10.1007/978-3-030-25666-1_9
- Heck, T., Keller, C., & Rittberger, M. (2024). Coverage and similarity of bibliographic databases to find most relevant literature for systematic reviews in education. *International Journal on Digital Libraries*, 25, 365–376.
<https://doi.org/10.1007/s00799-023-00364-3>
- Heckmann, F. (2005). *Integration and integration policies: IMISCOE network feasibility study*. Europäisches Forum für Migrationsstudien Institut and der Universität Bamberg.
<https://nbn-resolving.org/urn:nbn:de:0168-ssoar-192953>
- Hellang, Ø., & Espegren, A. (2022). *Gloppenmodellen: En fagutdanning for fremtiden* [The Gloppen model: Vocational education and training for the future] (Rapport nr. 6-2022 Helse og samfunn). NORCE.
<https://norceresearch.brage.unit.no/norceresearch-xmlui/handle/11250/2991216>

- *Henning Loeb, I. (2020). Continuously developing and learning while teaching second language students: Four storied narratives of accomplished VET teachers. *International Journal of Training Research*, 18(1), 68–83.
<https://doi.org/10.1080/14480220.2020.1747786>
- Høst, H., & Reymert, I. (2017). *Modeller for fagopplæring for voksne innvandrere* [Models for vocational education and training for adult immigrants] (NIFU Arbeidsnotat 2017:3). NIFU.
<https://www.nifu.no/publications/1465563/>
- Imdorf, C. (2017). Understanding discrimination in hiring apprentices: How training companies use ethnicity to avoid organisational trouble. *Journal of Vocational Education & Training*, 69(3), 405–423.
<https://doi.org/10.1080/13636820.2016.1278397>
- *Itkonen, T., Talib, M.-T., & Dervin, F. (2015). ‘Not all of us Finns communicate the same way either’: Teachers’ perceptions of interculturality in upper secondary vocational education and training. *Journal of Vocational Education & Training*, 67(3), 397–414. <https://doi.org/10.1080/13636820.2015.1062998>
- *James, S., Seidel, F. A., Kilian, J., & Trostmann, J. (2020). Labor market integration of young adult refugees in Germany: Triangulating perspectives toward program development. *Research on Social Work Practice*, 30(5), 553–563.
<https://doi.org/10.1177/1049731519897301>
- Jeon, S. (2019). *Unlocking the potential of migrants: Cross-country analysis*. OECD Reviews of vocational education and training. https://www.oecd-ilibrary.org/education/unlocking-the-potential-of-migrants_1ca47cd9-en
- Joyce, A., Earnest, J., De Mori, G., & Silvagni, G. (2010). The experiences of students from refugee backgrounds at universities in Australia: Reflections on the social, emotional and practical challenges. *Journal of Refugee Studies*, 23(1), 82–97. <https://doi.org/10.1093/jrs/feq001>
- *Jørgensen, C. H. (2022). Are apprenticeships inclusive of refugees? Experiences from Denmark. In L. M. Herrera, M. Teräs, P. Gougoulakis, & J. Kontio (Eds.), *Migration and inclusion in work life: The role of VET* (pp. 342–372). Atlas förlag.
- *Jørgensen, C. H., Hautz, H., & Li, J. M. (2021). The role of vocational education and training in the integration of refugees in Austria, Denmark and Germany. *International Journal for Research in Vocational Education and Training*, 8(3), 276–299. <https://doi.org/10.13152/IJRVET.8.3.2>
- Kindt, M. T., Høst, H., & Lyckander, R. H. (2024). *Følgeevaluering: Forsøk med nasjonal samarbeidsmodell for tilrettelagt fag- og yrkesopplæring for voksne innvandrere* [Formative evaluation of a pilot project: A national cooperation model for targeted vocational education and training for adult immigrants] (NIFU-rapport 2024:18). Nordic Institute for Studies in Innovation, Research and Education.
<https://nifu.brage.unit.no/nifu-xmlui/handle/11250/3164933>

- Koehler, C., & Schneider, J. (2019). Young refugees in education: The particular challenges of school systems in Europe. *Comparative migration studies*, 7(1), 28. <https://doi.org/10.1186/s40878-019-0129-3>
- Kunisch, S., Denyer, D., Bartunek, J. M., Menz, M., & Cardinal, L. B. (2023). Review research as scientific inquiry. *Organizational Research Methods*, 26(1), 3–45. <https://doi.org/10.1177/10944281221127292>
- Lambrechts, A. A. (2020). The super-disadvantaged in higher education: Barriers to access for refugee background students in England. *Higher Education*, 80(5), 803–822. <https://doi.org/10.1007/s10734-020-00515-4>
- Leirvik, M. S., & Staver, A. B. (2019). *Fag- og yrkesopplæring for voksne minoritetsspråklige: Hvordan inkludere flere flyktninger fra introduksjonsprogrammet?* [Vocational education and training for adult minority language speakers: How can more refugees from the Introduction Programme be included?] (NIBR-rapport 2019:2). By- og regionforskningsinstituttet NIBR, OsloMet – storbyuniversitetet.
- Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, 5, 1–9. <https://doi.org/10.1186/1748-5908-5-69>
- Lynnebakke, B., Pastoor, L., & Eide, K. (2020). *Young refugees' pathways in (to) education. Teacher and student voices: Challenges, opportunities and dilemmas* (CAGE Project Report Study 3a). University of Copenhagen.
- Manhica, H., Berg, L., Almquist, Y. B., Rostila, M., & Hjern, A. (2019). Labour market participation among young refugees in Sweden and the potential of education: A national cohort study. *Journal of Youth Studies*, 22(4), 533–550. <https://doi.org/10.1080/13676261.2018.1521952>
- Masten, A. S., Herbers, J. E., Cutuli, J., & Lafavor, T. L. (2008). Promoting competence and resilience in the school context. *Professional school counseling*, 12(2), 2156759X0801200213. <https://doi.org/10.1177/2156759X0801200213>
- *Maue, E., Diehl, C., & Schumann, S. (2021). Young refugees in prevocational preparation classes: Who is moving on to the next step? *Journal for Educational Research Online-Jero*, 13(1), 105–127. <https://doi.org/10.31244/jero.2021.01.04>
- Moreno Herrera, L., Teräs, M., Gougoulakis, P., & Kontio, J. (Eds.). (2022). *Migration and inclusion in work life: The role of VET*. Atlas förlag.
- Munn, Z., Peters, M. D., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Medical Research Methodology*, 18, 1–7. <https://doi.org/10.1186/s12874-018-0611-x>
- *Mustonen, S., & Strömmer, M. (2022). Becoming a multilingual health professional in vocational education: Two adult migrants' translanguaging trajectories. *Journal of Multilingual and Multicultural Development*, 45(9), 3678–3693. <https://doi.org/10.1080/01434632.2022.2116451>

- Mælan, E. N., Tjomsland, H. E., Baklien, B., Samdal, O., & Thurston, M. (2018). Supporting pupils' mental health through everyday practices: A qualitative study of teachers and head teachers. *Pastoral Care in Education*, 36(1), 16–28. <https://doi.org/10.1080/02643944.2017.1422005>
- Mælan, E. N., Tjomsland, H. E., Baklien, B., & Thurston, M. (2019). Helping teachers support pupils with mental health problems through inter-professional collaboration: A qualitative study of teachers and school principals. *Scandinavian Journal of Educational Research*, 64(3), 425–439. <https://doi.org/10.1080/00313831.2019.1570548>
- Nell-Müller, S., Happ, R., Zlatkin-Troitschanskaia, O., & Reinhardt, F. (2021). Experiences of refugees when entering higher education and over the course of their studies: A literature review of structural and personal challenges. In O. Zlatkin-Troitschanskaia, S. Nell-Müller, & R. Happ (Eds.), *Digital approaches to promoting integration in higher education: Opening universities for refugees* (pp. 31–68). Springer.
- Nilsson, A. (2010). Vocational education and training: An engine for economic growth and a vehicle for social inclusion? *International Journal of Training and Development*, 14(4), 251–272. <https://doi.org/10.1111/j.1468-2419.2010.00357.x>
- Oppedal, B., Guribye, E., & Kroger, J. (2017). Vocational identity development among unaccompanied refugee minors. *International Journal of Intercultural Relations*, 60, 145–159. <https://doi.org/10.1016/j.ijintrel.2017.04.004>
- *Ortlieb, R., & Ressi, E. (2022). From refugee to manager? Organisational socialisation practices, refugees' experiences and polyrhythmic socialisation. *European Management Review*, 19(2), 185–206. <https://doi.org/10.1111/emre.12500>
- Papaioannou, D., Sutton, A., Carroll, C., Booth, A., & Wong, R. (2010). Literature searching for social science systematic reviews: Consideration of a range of search techniques. *Health Information & Libraries Journal*, 27(2), 114–122. <https://doi.org/10.1111/j.1471-1842.2009.00863.x>
- *Paul, E. (2023). 'The wrong' kind of students or 'Santa's workshop'? Teaching practices for newly arrived migrant students in Swedish upper secondary VET. *Vocations and Learning*, 16(1), 157–177. <https://doi.org/10.1007/s12186-023-09313-2>
- Penninx, R., & Garcés-Mascareñas, B. (2016). The concept of integration as an analytical tool and as a policy concept. In B. Garcés-Mascareñas, & R. Penninx (Eds.), *Integration processes and policies in Europe: Contexts, levels and actors* (pp. 11–29). Springer Open. <https://doi.org/10.1007/978-3-319-21674-4>
- Pilz, M. (2016). Typologies in comparative vocational education: Existing models and a new approach. *Vocations and Learning*, 9(3), 295–314. <https://doi.org/10.1007/s12186-016-9154-7>

- Ravn, R. L., Österberg, E. E., & Thomsen, T. L. (2022). Labour market policies and refugees: The case of Denmark, Sweden, the Netherlands and Germany. In C. A. Larsen (Ed.), *Migrants and welfare states* (pp. 64–94). Edward Elgar Publishing.
- *Reinke, H., & Goller, M. (2022). Supporting young immigrants in their transition from school to work? A staff perspective on challenges of vocational integration classes. *International Journal for Research in Vocational Education and Training*, 9(1), 92–119. <https://doi.org/10.13152/IJRVET.9.1.5>
- Rintala, H., & Nokelainen, P. (2020). Vocational education and learners' experienced workplace curriculum. *Vocations and Learning*, 13(1), 113–130. <https://doi.org/10.1007/s12186-019-09229-w>
- Roth, T., & Weißmann, M. (2022). The role of parents' native and migrant contacts on the labour market in the school-to-work transition of adolescents in Germany. *European Sociological Review*, 38(5), 707–724. <https://doi.org/10.1093/esr/jcac022>
- *Rusert, K., & Stein, M. (2023). Chances and discrimination in dual vocational training of refugees and immigrants in Germany. *Journal of Vocational Education & Training*, 75(1), 109–129. <https://doi.org/10.1080/13636820.2022.2148118>
- Schwenken, H. (2021). Differential inclusion: The labour market integration of asylum-seekers and refugees in Germany. In B. Galgóczi (Ed.), *Betwixt and between: Integrating refugees into the EU labour market* (pp. 135–164). ETUI publications.
- *Stalder, B. E., Kammermann, M., Michel, I., & Schönbächler, M.-T. (2023). Successful integration of refugees in vocational education and training: Experiences from a new pre-vocational programme. In M. Teräs, A. Osman, & E. Eliasson (Eds.), *Migration, education and employment: Pathways to successful integration* (pp. 133–154). Springer International Publishing.
- The Joanna Briggs Institute. (2015). *The Joanna Briggs Institute reviewers' manual 2015: Methodology for JBI scoping reviews*. <https://reben.com.br/revista/wp-content/uploads/2020/10/Scoping.pdf>
- Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D., Horsley, T., & Weeks, L. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of internal medicine*, 169(7), 467–473. <https://doi.org/10.7326/M18-0850>
- *Verwiebe, R., Kittel, B., Dellinger, F., Liebhart, C., Schiestl, D., Haindorfer, R., & Liedl, B. (2019). Finding your way into employment against all odds? Successful job search of refugees in Austria. *Journal of Ethnic and Migration Studies*, 45(9), 1401–1418. <https://doi.org/10.1080/1369183X.2018.1552826>

- *Wehking, K. (2023). Educational inclusion or inequality? Opportunities and barriers for refugees with a temporary suspension of deportation for the purpose of training in the German vocational education and training system. *Journal of Education and Work*, 36(6), 426–445. <https://doi.org/10.1080/13639080.2023.2255155>
- Wilder, E. I., & Walters, W. H. (2021). Using conventional bibliographic databases for social science research: Web of Science and Scopus are not the only options. *Scholarly Assessment Reports*, 3(1), 1–17. <https://doi.org/10.29024/sar.36>