



Report on Vocational Education and Training 2022



Foreword



Completing a vocational training programme gives people excellent prospects in the labour market – today more than ever. Businesses are desperately seeking well-qualified skilled workers. Yet this promise of success is reaching the limits of its appeal. In recent years, many training places have gone unfilled because too few young people opted for vocational training.

One reason for this is the coronavirus pandemic, which has had a significant impact on our society and on economic developments over the past two years. The effects are also being felt in the training market: 2020 saw a marked fall in the number of training contracts in the dual system.

The vocational education and training partners have done a great deal to counter this trend. They have expanded digital career orientation. Financial support has been provided to small and medium-sized companies that were hit particularly hard by the pandemic so that they could maintain or even increase their provision of training places. This even included grants for companies which continue training programmes that were halted by the pandemic.

Now we are seeing the start of a turnaround. In 2021, there was a small rise again in the number of training contracts. And I very much hope that this trend will now continue so that we can return to and move beyond the pre-pandemic level.

The first steps have already been taken: together with our partners in the Alliance for Initial and Further Training, we have decided to hold another "Summer of Vocational Training". Our aim is to persuade young people who are still unsure, or have not yet made up their minds, to choose vocational education and training and bring them together with companies.

In addition, the attractiveness of vocational education and training must be made clearer. The dual system has always been one of the major strengths of our economy, and we are continuing to rely on it as we tackle the technological and environmental transformation which is already under way. To this end, we need well-qualified skilled workers, and consequently a strong and respected vocational education and training system. Working towards this goal is at the top of my political agenda. In this electoral term, we will therefore launch an Initiative for Excellence in Vocational Education and Training.

Vocational education and training is a guarantor of prosperity – for us and for the individual. It enables people to make an excellent start in working life and it offers them superb advancement and career opportunities. It is a shining example of the fact that being a country of education goes hand in hand with being a country of innovation.

B. Fresh-Waterings

Bettina Stark-Watzinger
Member of the German Bundestag
Federal Minister of Education and Research

Table of contents

The	most important facts in brief	3
1	The training market in 2021 and its challenges	4
2	The training market situation in 2021	19
2.1	The applicant situation	19
2.1.1	Developments in school leaver numbers and outlook for the period to 2030	19
2.1.2	Demand for dual training under the Vocational Training Act and Crafts Code	19
2.1.3	Developments in the transition sector and the transition into training	24
2.2	The supply of training places	27
2.2.1	Training places offered under the Vocational Training Act and Crafts Code	
2.2.2	Companies' participation in training	28
2.2.3	Training and work-study programmes	
2.3	New training relationships and supply and demand for training in 2021	32
2.3.1	Integrated Reporting on Training	
2.3.2	Training in occupations under the Vocational Training Act and Crafts Code	
2.3.3	Training for occupations outside the dual system: new trainees in healthcare occupations	
2.3.4	Training for occupations outside the dual system: new trainees in social services and education occupations	57
2.3.5	Training for occupations outside the dual system: training in public service occupations	
2.3.6	Forecast of supply and demand trends in the training market in 2022	
2.4	Developments after the start of training	61
2.4.1	Unplaced applicants and unfilled training places	
2.4.2	The destination of applicants registered with employment agencies and jobcentres	
2.4.3	Subsequent placement	
2.4.4	Young people in part-time training	
2.4.5	Integrating young people from a migrant background into training	
2.4.6	Premature training contract termination	
247	Success in vocational training examinations	21

2.5	The transition to employment	82
2.5.1	Companies' employment of their trainees	82
2.5.2	Young adults with no vocational qualifications	
2.6	Upgrading skills through vocational training, and continuing vocational education a	and training84
3	Overview of Federal Government labour market policy activities and programmes	89
4	Opinion of the BIBB Board on the draft Report on Vocational Education and Training 2022	125
4.1	Joint opinion of the groups of employer, employee, and Länder representatives	125
4.2	Opinion of the group of employer representatives	125
4.3	Opinion of the group of employee representatives	127
4.4	Opinion of the group of Länder representatives	128
List of	f tables	129
List of	f charts	130
List of	f abbreviations	131
Impri	nt	133

The most important facts in brief



Low numbers of people starting vocational education and training

According to Integrated Reporting on Training, the number of people starting vocational training increased somewhat in 2021. Within this sector, there was a slight rise of 1.3% in the number of people starting dual training. There was a slight fall in the case of school-based vocational training for healthcare, education, and social services occupations. The integration into training (transition sector) and tertiary studies sectors also reported falling numbers in 2021, while the acquisition of a higher education entrance qualification sector recorded a small rise in the number of people starting training.



Slight rises in the number of newly concluded training contracts under the Vocational Training Act (Berufsbildungsgesetz) and Crafts Code (Handwerksordnung)

In 2021, the number of newly concluded training contracts rose slightly by 1.2%, reaching 473,100, with growth in almost all training sectors. The only areas which saw a decline were trade and industry and the public service. The number of newly concluded training contracts in 2021 was still well below the prepandemic level (–9.9% by comparison with 2019).



Slight increase in the supply of training places, challenges in terms of demand for training

Compared to the previous year, the number of training places available increased by 1.7% to 536,200. Demand for training places according to the traditional definition remained almost unchanged (+0.2% to 497,700). When applicants with an alternative are included in the figures, demand according to the expanded definition fell by 0.9% to 540,900. Both supply (-7.3% by comparison with 2019) and demand (traditional definition: -9.4%; expanded definition: -9.7%) were still well below the pre-pandemic level in 2021.



Existing challenges in the matching of supply and demand

At the end of September 2021, there were 63,200 unfilled training places (+5.4%) and 24,600 completely unplaced applicants (-16.1%). The proportion of places offered by companies which went unfilled thus continued to rise, while the proportion of applicants still seeking a place fell. As in previous years, the figures varied in different regions and occupations.



Fall in the number of companies providing training, while the percentage remained stable

Overall, the number of companies providing training fell by 1.4% to 419,700 in the 2020 reporting year. The largest decline was recorded by micro-enterprises. This trend correlates with the difficulties that micro-enterprises have in filling training places. The percentage of companies providing training, at 19.4%, remained almost unchanged compared to the previous year (2019: 19.6%).



Training trajectories remained stable despite the pandemic

In 2020, the premature training contract termination rate was 25.1% (2019: 26.9%). The pass rate for candidates sitting final training exams was 92.3% (2019: 92.8%). Despite the difficult conditions, the pandemic did not lead to a rise in premature contract terminations or have an adverse impact on the pass rate for final exams in 2020.

1 The training market in 2021 and its challenges

In 2021, for the second year in a row, vocational training was influenced by the coronavirus pandemic. Companies found themselves facing disrupted supply chains, temporary closures, and economic uncertainty. Adolescents and young adults faced challenges when seeking training places and limited options to access career orientation.

Despite continuing pandemic-related challenges, major efforts by all vocational education and training stakeholders have managed to prevent a further decline in newly concluded training contracts. In 2021, the number of newly concluded training contracts in the dual system rose slightly to 473,100; however, this is still well below the pre-pandemic level (–9.9% by comparison with 2019). Besides the pandemic, overarching trends are playing an important role in this, such as the shift towards full-time school-based vocational training and remaining in the school system, and transformation processes in the economy.

It is important to try to avoid the coronavirus pandemic having long-term negative effects on the training market, like those that were observed after the 2008/2009 economic crisis. Young people who opted not to begin vocational training during the pandemic due to the current uncertainty must not be allowed to slip through the cracks, as vocational education and training is an essential foundation for securing the next generation of young skilled workers.

For young people seeking a vocational training place, the market situation improved in statistical terms in 2021. However, companies reported that the problems they faced in filling training places continued to worsen. Matching supply and demand therefore remains a key area for action in the field of vocational education and training policy. This is an area where, alongside occupation-related and regional disparities, qualification-related challenges faced by some groups of applicants play a role.

This report provides data on companies' participation in training, the premature training contract termination rate, and final training exams in the first year of the pandemic, supplementing previous findings on the pandemic's effects on the dual vocational training

system. Initial analyses indicate that vocational education and training is highly robust and flexible, at least for those who were in a training relationship in 2020.

As in last year's report, a selection of important measures taken by the Federal Government in relation to vocational education and training are briefly described in boxes in **Chapter 1**. **Chapter 3** provides an overview of the Federal Government's vocational training policy activities in the form of a table. Of course, there are many other activities for which the Länder (federal states) and other partners are responsible. Regarding **Chapters 1 and 2**, it should also be noted that, due to differences in data collection periods and data availability, the reference years for some data vary (e. g. the reference year for newly concluded training contracts is 2021, while the reference year for the premature training contract termination rate is 2020).

The "Safeguarding training places" federal programme

In response to the coronavirus pandemic and to implement the economic stimulus package of 3 June 2020, a total of 500 million euros was made available through the "Safeguarding training places" (Ausbildungsplätze sichern) federal programme for 2021 to support small and medium-sized companies (SMEs) particularly affected by the pandemic to maintain or increase the number of training places they offer young people and to continue vocational training programmes that were under way. The programme includes grants for training and for employing former trainees, subsidies for paying both trainees and training personnel in order to prevent short-time work, a special Lockdown II subsidy for micro-enterprises (first funding regulation), funding for training provided by external providers and collaborative training, and funding for courses to prepare trainees for exams (second funding regulation). On 17 March 2021, the Cabinet decided to expand the programme's scope and extended it to cover the 2021/2022 training year.

I. Vocational education and training in 2021

Since 2005, Integrated Reporting on Training (iABE) has been delivering detailed annual data on the training and education activities of young people who have completed lower secondary education. The data is divided into the following four sectors: vocational training, integration into training (transition sector), acquisition of a higher education entrance qualification, and tertiary studies.¹

Vocational training has traditionally been the largest sector, including as it does all training leading to full vocational qualifications, including dual training under the Vocational Training Act (Berufsbildungsgesetz) and the Crafts Code (Handwerksordnung), school-based vocational training, and training for the intermediate service of the German civil service. The number of new entrants in this sector in 2021 was 677,500 in total (48.2% of them women)2, a slight rise of 0.2% compared to the previous year. Within this sector, the number of people starting vocational training in the dual system rose by 1.3% or 5,500, reaching 437,800 in 2021 (36.8 % of them women). According to 2021 iABE Interim Report data, school-based vocational training in the field of healthcare, education, and social services³ saw a decline of 1.5 % to 188,300 new entrants (75.8 % of them women). It is important to note that this data cannot provide a completely accurate picture due to the partial use of data from the previous year and the changes to data collection for trainees under the Care Professions Act (Pflegeberufegesetz).

The transition sector includes courses that prepare young people for participation in vocational training. These include courses leading to partial qualifications, but also training courses for young people returning to education to gain a general lower-secondary qualification or a higher-level school-leaving certificate, as well as obligatory internships prior to beginning

vocational training. There were 228,100 new entrants (39.0% of them women) in the transition sector in 2021, which is 6,500 fewer people than in the previous year (-2.8%). It can be assumed that, because of the pandemic, fewer young people took up careers guidance or asked to be placed in training, and this presumably also led to fewer people being placed in measures in the transition sector.

The acquisition of a higher education entrance qualification sector covers courses at upper secondary level that enable young people at vocational or general schools to gain an entrance qualification for studies at a university of applied sciences (Fachhochschulreife) or a general higher education entrance qualification. In 2021, this sector grew again by comparison with 2020, with the number of new entrants in 2021 rising by 1,900 (+0.4%) to reach 487,800, 53.1% of them women.

The fourth sector records the number of new students at higher education institutions. After experiencing regular growth until 2017, this sector saw a decline in new student numbers to 475,500 in 2021 (52.3 % of them women). This is a fall of 3.8% compared to the previous year. Looking at the breakdown between German and international first-year students shows that the number of new German students fell (-8.5% or -33,000), while the number of new international students rose in 2021 (+14.9% or +15,000). The fact that fewer non-nationals who acquired their university entrance qualifications outside Germany were able to begin studying in Germany in 2020 due to the pandemic, resulting in a sharp fall in the number of new international students in 2020, is undoubtedly a factor in this.

Comparing education and training activities in 2021 with those in 2019, the year before the coronavirus pandemic, a shift towards school-based vocational training for healthcare, education, and social services occupations can be identified, as well as a shift towards remaining in the school system to obtain a higher-level school-leaving certificate.

Looking at the overall picture, the demographic trend of a decline in the number of school leavers from general schools, who make up the basic constituency for training, distributed across the four sectors, appears to have come to a halt for the time being. According to a recent prognosis made by the Federal

¹ For the 2020 reporting year, there are discrepancies with the information provided in the Report on Vocational Education and Training 2021. It drew mainly on an estimate produced by the Federal Institute for Vocational Education and Training (BIBB) based on the 2020 iABE Interim Report, as the published Interim Report data was not entirely reliable last year (see also Chapter 2.3.1).

The figures in Chapter 1 have been rounded to the nearest hundred. Absolute figures can be found in Chapter 2.

³ The iABE uses the term "school-based vocational training for healthcare, education and social services occupations" in this context.

Institute for Vocational Education and Training (BIBB), based on the forecast of school student and school leaver numbers made by the Conference of Ministers of Education and Cultural Affairs (KMK), the number of school leavers will fluctuate somewhat in the coming years. It will be higher in the years from 2021 to 2024 than it was in 2020. According to the forecasts produced by the Conference of Ministers of Education and Cultural Affairs, the number of school leavers from general schools is expected to rise by 2.3 % in 2021, following a significant fall in the number of school leavers in 2020 (–5.1 %).⁴

Analyses carried out by the BIBB indicate that the trends in the dual training system (in terms of the number of newly concluded training contracts) will in future return to being shaped more by companies' training efforts and young people's placement opportunities, and less by demographic trends.⁵

II. Slight increases in the supply of training places, but challenges still exist in terms of demand for dual training

As a result of the coronavirus pandemic and the associated restrictions, the training market experienced significant setbacks in 2020. The number of training places available and young adults' demand for vocational training declined almost in parallel. The number of newly concluded training contracts on the reference date of 30 September 2020 fell by 11% compared to 2019, to 467,500 training contracts. This resulted in a marked contraction of the dual training system in the 2020 reporting year.

For the current 2021 reporting year, the first small signs of a recovery in the training market can be observed, yet the impacts of the coronavirus pandemic

The Skilled Immigration Act

Since its entry into force, the Skilled Immigration Act (Fachkräfteeinwanderungsgesetz) has expanded access to Germany's labour market for skilled workers from third countries. It offers a new option of spending up to six months in Germany to look for a training place. It is also still possible to receive a residence permit for the purpose of vocational training and, after successfully completing a qualifying vocational training programme lasting at least two years, to receive a residence permit for the purpose of employment. If the individual does not yet have an employment contract after completing vocational training, a residence permit for the purpose of seeking employment can be issued for twelve months. Most of the changes introduced apply to skilled workers with a qualifying vocational qualification. Skilled workers in all training occupations can now receive a residence permit for the purpose of employment if their foreign qualification has been recognised as being equivalent to a German qualification. This is no longer limited to occupations facing shortages of skilled workers. In addition, the options for people to spend time in Germany to have their professional qualifications recognised and look for work have been expanded.

are still being clearly felt. Vocational training is still a long way from returning to its pre-pandemic levels. There were still significant challenges in 2021, especially in the context of demand for dual training under the Vocational Training Act and Crafts Code. The focus is therefore still on boosting the attractiveness of vocational education and training and securing a supply of young skilled workers for companies.

The supply of training places, which consists of newly concluded training contracts and unfilled training places, rose in 2021 compared to the previous year. Nationwide, the number of training places available rose by 8,800 (+1.7%) to 536,200. The number of training places offered by companies rose by 7,200 to 519,700 (+1.4%). Comparing the supply of training places in 2021 with the level in 2019, prior to the pandemic, shows a decline of 41,900 places (-7.3%).

⁴ See Conference of Ministers of Education and Cultural Affairs (Kultusministerkonferenz) (2021): Vorausberechnung der Zahl der Schülerinnen/Schüler und Absolvierenden 2020 bis 2035 (Forecast of the number of school students and school leavers from 2020 to 2035); no. 230; November 2021; (kmk.org/fileadmin/Dateien/pdf/ Statistik/Dokumentationen/Dok_230_Vorausberechnung_Schueler_ Abs 2020 2035.pdf).

⁵ See Maier, Tobias (2021): Markiert die COVID-19-Krise einen Wendepunkt auf dem Ausbildungsmarkt? Ein Ausblick auf die mögliche Entwicklung neuer Ausbildungsverträge bis 2030 (Does the COVID-19 crisis mark a turning point on the apprenticeship market? A forecast of the possible development of new apprenticeship contracts up until 2030).. In BWP 2 (2021), p. 20–24.

The "Securing a skilled base: continuing vocational education and training and gender equality" initiative

The funding regulation for the federal European Social Fund (ESF) programme "Securing a skilled base: continuing vocational education and training and gender equality", also known as the Social Partner Directive (Fachkräfte sichern: weiter bilden und Gleichstellung fördern – Sozialpartnerrichtlinie), is intended to support the efforts of the social partners and company stakeholders to secure the supply of skilled labour and adapt to demographic change. It has the following aims, in particular:

- Developing sustainable continuing education and training structures in companies via systematic human resources development and continuing training strategies, with the aim of shaping demographic change. The aim is to reach groups such as, in particular, older people, women, semi-skilled and unskilled workers, skilled migrant workers, and people from a migrant background, as these groups tend to participate less in continuing training.
- Significantly increasing participation in continuing education and training in small and medium-sized companies, and more strongly establishing sector-wide cultures of continuing training.

The Digital Pact for Schools

Federal support for digital infrastructure in vocational schools is helping to further boost the attractiveness of vocational schools. The Digital Pact for Schools (DigitalPakt Schule) enables vocational schools to purchase a wide range of items, reflecting the different occupational fields. The nationwide digital infrastructure for vocational schools is also being advanced by initiatives involving multiple Länder (e.g. "Website for vocational education and training" and "Networked future labs at vocational schools"). On the whole, a higher proportion of vocational schools than general schools are receiving funding as part of the Digital Pact for Schools.

After a decline in the number of unfilled training places was recorded for the first time in 2019, the 2021 reporting year has seen a renewed rise. According to figures provided by the Federal Employment Agency (Bundesagentur für Arbeit – BA), 63,200 training places were still unfilled at the end of September 2021. This represents an increase of 3,200 (+5.4%) compared to the previous year.

Demand for training places (based on the traditional definition), which consists of newly concluded training contracts and unplaced applicants, remained almost unchanged compared to the previous year: in the 2021 reporting year, 497,700 people were looking for a training place (+0.2% or +800). Demand dropped significantly compared to the year before the pandemic, with a fall of 51,900 (-9.4%).

On 30 September 2021, 24,600 applicants were still completely unplaced. This is a significant fall of 16.1% or 4,700 people compared to the previous year. Within the group of unplaced applicants, falls were recorded for all age groups and all types of school-leaving certificates.

However, if demand for training places is examined using the expanded definition – in other words, including those still looking for a training place but who already have an alternative such as continuing with school, or undertaking tertiary studies or a pre-vocational training programme – it continued to decline in 2021. Demand according to the expanded definition fell by 4,800 people to 540,900, a reduction of 0.9%. The number of applicants with an alternative in 2021, at 43,200, was lower than in the previous year (–5,700 or –11.6%). Compared to 2019, demand according to the expanded definition fell by 57,900 (–9.7%).

Taken together, these figures produce a supply and demand ratio (ANR) of 107.7 (previous year: 106.2). This means that for every 100 people seeking a training place, there were 107.7 training places available. In 2021, expanded ANR rose significantly from 96.6 to 99.1 due to the slight increase in the supply of training places coupled with the further decline in demand for training places according to the expanded definition. The market situation has therefore improved from the perspective of a young person seeking a training place, although this is

probably primarily caused by lower demand and a smaller number of young people being interested in vocational training compared to previous years.

The placement rate of young people interested in training (EQI), at 66.9, was higher than in the previous year (2020: 64.5) and was thus at a similar level to the year immediately prior to the pandemic (2019: 66.7).

According to the BIBB survey carried out on 30 September 2021, the number of newly concluded training contracts rose by 5,600 to 473,100. This is an increase of 1.2%. Rises were recorded for both company-based training contracts (+0.9%) and non-company training contracts (+10.9%). However, compared to 2019, the year before the pandemic, the number of new training contracts remained at a much lower level (-52,000 or -9.9%).

The Alliance for Initial and Further Training

The Alliance for Initial and Further Training (Allianz für Aus- und Weiterbildung), which consists of representatives of the Federal Government, the Federal Employment Agency, the central associations of German business, the trade unions, and the Länder, aims to further strengthen the attractiveness, quality, and performance of vocational education and training and its power to promote integration. The aim is to enable more young people to find training places in companies and to help more companies to fill their training places. The Alliance also seeks to ensure that vocational education and training enjoys equal standing as an alternative to academic education, highlighting the modern advanced training available and the career paths it enables. The Alliance also specifically addresses structural issues and, in particular, the challenges that are impacting the training market because of the pandemic; this includes measures to tackle the significant demandside challenges in the training market (shortage of applicants).

The "Die Duale – Berufsbildung mit System" information campaign

To encourage more young people and those who advise and advocate for them to consider the option of dual vocational training, a wide-ranging information campaign, "Die Duale", was launched in August 2020. The campaign highlights the wide range of career prospects that dual vocational training offers and it provides information on the improvements resulting from amendments to the Vocational Training Act while also making the attractiveness of dual vocational training more visible to the wider public.

Following marked falls in 2020, almost all training sectors saw a rise in newly concluded training contracts in 2021 (professional services: +9.4%; housekeeping: +9.1%; agriculture: +5.6%; skilled trades: +3.0%; shipping: +1.9%). The only sectors which saw a decline in new training contracts were trade and industry (-1.1%) and the public service (-3.1%).

The proportion of new training contracts in the dual system concluded by women was almost unchanged in the 2021 reporting year compared to the previous year (2021: 36.3%; 2020: 36.4%).

The number of applicants from a forced migration background registered with the Federal Employment Agency continued to fall in the 2021 reporting year. 31,100 applicants from a forced migration background were registered with the Federal Employment Agency as seeking training (–2,100 or –6.3%), and 10,200 of them were placed in vocational training (32.9%).

⁶ In their coalition agreement, the parties of the governing coalition have stated that they intend to continue the Alliance for Initial and Further Training as an "alliance for vocational training".

III. Training in healthcare, social services, and education occupations

Alongside dual training, school-based vocational training is the second pillar of vocational training in Germany. By far the largest proportion of trainees in this type of training choose healthcare, social services, and education occupations. These courses are outside the scope of the Vocational Training Act and Crafts Code; they are regulated in the provisions of federal or Land legislation and are provided at full-time vocational schools, health-sector schools, and trade and technical schools.⁷

In clear contrast with the situation in other schoolbased training occupations, training in this area has expanded substantially in recent years. The number of people starting training in healthcare, social services, and education occupations rose by 32.0% between 2005 and 2021, reflecting wider social changes. For example, the need for skilled staff in the care and nursing sector has risen as a result of demographic and epidemiological developments (increases in life expectancy, in rates of multimorbidity, and in the prevalence of diseases of dementia). The coronavirus pandemic has also highlighted the need for trained nursing staff. In addition, demand for early childhood educators has continued to grow, not least due to the expansion of early childhood care provision. Demand for out-of-school educators is expected to remain high in the coming years so that a level of provision of day care for children that will meet current needs can be established, good quality care ensured, and the planned legal right to all-day care for primary school children implemented.

According to 2021 iABE Interim Report data, the number of new trainees in healthcare, social services, and education training occupations was 188,300, a decline of 1.5 % compared to the previous year.

7 Many of the healthcare, social services, and education occupations regulated by federal and Land law are taught both in the workplace (e.g. a hospital) and at a school (e.g. a nursing school). Nonetheless, the term "school-based" vocational training is very established for these courses, despite their more dual structure. The terminology used says nothing about the importance of this pillar of vocational training in Germany. In the field of healthcare professions (excluding nursing and care training programmes⁸ regulated by federal law), which includes vocational training regulated by Land law to qualify as a geriatric nursing

Vocational Training Initiative for the Care Sector: more trainees in care professions

The Vocational Training Initiative for the Care Sector (Ausbildungsoffensive Pflege), which runs from 2019 to 2023, accompanies the introduction of the new forms of care and nursing training that were launched on 1 January 2020. The Federation, Länder, and industry associations have agreed on numerous measures in three fields of action, with the aim of supporting the stakeholders in care and nursing training, creating attractive training conditions, and further increasing the number of trainees and organisations providing training. In August 2021, the second report was published on the state of play regarding implementation of the agreements reached by working groups one to five of Concerted Action for Nursing (Konzertierte Aktion Pflege), and it offers a positive assessment of the Vocational Training Initiative for the Care Sector. Already in the first year of the new forms of care and nursing training, despite the impact of the coronavirus pandemic, the number of people beginning care and nursing training rose by around 2%.9 In 2021, according to provisional figures from the Federal Statistical Office, 61,458 trainees began vocational training to qualify as a general nurse (Pflegefachkraft), meaning that the number of new entrants rose by 7% compared to the previous year.¹⁰

⁸ With effect from 1 January 2020, data on trainees whose training is governed by the Care Professions Act (Pflegeberufegesetz) is collected and published as part of the statistics pursuant to the Ordinance on the Funding of Vocational Training for Care Professions (Statistik nach der Pflegeberufe-Ausbildungsfinanzierungsverordnung).

⁹ The first report on the Vocational Training Initiative for the Care Sector of November 2020 can be accessed at pflegeausbildung.net/ausbildungsoffensive-und-kampagne/erster-bericht.html. The second report on the state of play regarding implementation of the agreements of Concerted Action for Nursing as a whole was published in August 2021 and can be found at bundesgesundheitsministerium.de/fileadmin/Dateien/3_Downloads/K/Konzertierte_Aktion_Pflege/KAP_Zweiter_Bericht_zum_Stand_der_Umsetzung_der_Vereinbarungen_der_Arbeitsgruppen_1_bis_5.pdf.

¹⁰ Press release by the Federal Statistical Office (Destatis): 2021 statistics under the Caring Professions Vocational Training Financing Ordinance (reference date: 31 December 2021) (destatis.de/DE/ Presse/Pressemitteilungen/2022/03/PD22_135_212.html).

assistant or care assistant, as well as training regulated by federal law, for example, to qualify as an occupational therapist, there were a total of around 41,600 first-year trainees (70.6% of them women) in the 2020/2021 school year, according to subject-matter series 11 series 2 published by the Federal Statistical Office (Statistisches Bundesamt). This represents a decline of 2.9%, or around 1,200 people.

The field of social services and education occupations includes the training occupations of early childhood educator, childcare worker, and social assistant. The number of first-year trainees in the 2020/2021 school year was around 78,700 people (78.8% of them women). This was a fall of 3.8% or around 3,100 people compared to the previous year.

Launch of the new training occupations of anaesthetic technician and surgical technician

Vocational training under the Anaesthetic Technician and Surgical Technician Act (Anästhesietechnischeund Operationstechnische Assistenten-Gesetz) of 14 December 2019 (Federal Law Gazette I 2019, p. 2768), which created consistent national regulations for these two training occupations for the first time, began on 1 January 2022. This has established modern, patient-oriented, high-quality training for the occupations of anaesthetic technician and surgical technician.

Reform of vocational training for occupations in the field of medical technology

The Act Reforming Medical Technician Occupations and Amending Other Acts (Gesetz zur Reform der technischen Assistenzberufe in der Medizin und zur Änderung weiterer Gesetze) of 24 February 2021 (Federal Law Gazette I 2021, p. 274) reforms and strengthens vocational training for the four occupations in the field of medical technology (laboratory analysis, radiography, functional diagnostics, and veterinary medicine). The Act is an important first step in implementing the Overarching Strategy for the Technical Health Professions (Gesamtkonzept Gesundheitsfachberufe), and it will enter into force on 1 January 2023.

IV. Existing challenges in the matching of supply and demand

2021 saw rises in both the supply and demand ratio (ANR) and expanded ANR. This means that demand for training places (according to the expanded definition) fell in relation to the supply of training places. Thus, from the perspective of young people seeking a training place, the training market situation improved. From a statistical perspective, at least, each young adult was competing with fewer other applicants for the offer of a training place. This was also reflected in the decline in applicants still seeking a training place as a percentage of total demand (2019: 12.3%; 2020: 14.3%; 2021: 12.5%).

However, seen from the perspective of companies, the rise in the supply and demand ratios means a smaller pool of applicants, and thus greater challenges in filling training places. This is also shown by the renewed rise in unfilled training places as a percentage of all training places available in companies in 2021 (2019: 9.4%; 2020: 11.7%; 2021: 12.2%).

Matching supply and demand in the training market remains a key area for action in the field of vocational education and training policy, even if the extent to which regions, sectors, and occupations are affected by these challenges varies. For example, occupations in catering, the food trade, and the cleaning sector often experienced problems in filling training places, while media occupations or the occupation of an animal keeper, for example, tended to face supply problems. If the supply of training places remains constant, supply and demand at occupational level can be better matched only by significantly increasing the occupational flexibility of young adults interested in vocational training.¹¹ Sufficient flexibility on the part of companies when it comes to selecting or recruiting applicants is also vital in this context.

For both applicants and companies, the transition to dual vocational training is partly determined by the rules of the market and varies depending on the

See Schuß, Eric; Christ, Alexander; Oeynhausen, Stephanie; Milde, Bettina; Flemming, Simone; Granath, Ralf-Olaf (2021): Die Entwicklung des Ausbildungsmarktes im Jahr 2021 (The development of the training market in 2021) (version of 15 December 2021).

training market situation.¹² If there is a surplus of applicants, companies can place higher demands on applicants, whereas if there is a surplus of training places, companies have to compete for a limited number of applicants.

Analyses of the 2016 survey of applicants carried out by the Federal Employment Agency (BA) and the Federal Institute for Vocational Education and Training (BIBB) offered indications that young people in regions with a more favourable market situation for applicants (in terms of ANR) expected more from companies (e.g. flexible working hours). Young people having a strong market position due to higher-level school-leaving certificates also led to them having higher expectations of companies.¹³

It appears that alongside "hard factors", such as ANR and school-leaving certificates, "soft factors" such as the need for recognition from work and psychological aspects relating to identity, also play a key role in the choice of occupation, and thus also in the filling of training places.¹⁴

A study by the Organisation for Economic Co-operation and Development showed that the proportion of young people in one of the ten most popular occupations has risen in recent years. The strong focus on popular occupations can, firstly, increase the probability of young adults missing out due to the high level of competition in the search for a training place. Secondly, it can exacerbate the problems in filling training places in supposedly less attractive fields.

Particularly when the market situation is good for young people seeking a training place, it could be

recruit applicants for less well-known and less attractive training places (e.g. occupations with a low social standing, less attractive training and working conditions, limited occupational development opportunities).

difficult at times – perhaps even all but impossible – to

All of this illustrates that a nuanced examination of the challenges in matching supply and demand is essential, and this issue should be addressed at the level of vocational education and training policy using instruments and measures with different focuses.

Youth employment agencies

To better reach young people making the transition from school into work, jobcentres, youth welfare offices, and employment agencies work closely together to support young people through crossjurisdictional cooperative ventures, known in many areas as youth employment agencies (Jugendberufsagenturen). The agencies work to enable young people to better understand the diverse opportunities that the world of work offers, to provide instruments promoting training in a more targeted manner, and to offer support within a framework of occupational and social participation. To support a nationwide dialogue, the Federal Ministry of Labour and Social Affairs (Bundesministerium für Arbeit und Soziales) set up a service office for youth employment agencies at the Federal Institute for Vocational Education and Training (BIBB) in November 2019. Cross-jurisdictional cooperation is also a key issue in the Federation-Länder agreements in the new phase of the Education Chains initiative (Initiative Bildungsketten).

12 See Eberhard, Verena (2016): Der Übergang im Überblick – Von den Herausforderungen eines marktgesteuerten Ausbildungszugangs (Transition at a Glance – About the Challenges of a Market-based Access to Vocational Education and Training). In: Sozialer Fortschritt 9–10, p. 211–216.

- 13 See Eberhard, Verena; Ulrich, Joachim Gerd (2017): Sind Jugendliche mit starker Marktposition anspruchsvoller bei der Betriebswahl? (Are young people with a strong market position more demanding when choosing a company?) In: Berufsbildung in Wissenschaft und Praxis 4, p. 19–23.
- 14 See Mathes, Stephanie (2019): Warum werden Berufe nicht gewählt? Die Relevanz von Attraktions- und Aversionsfaktoren in der Berufsfindung (Why are occupations not chosen? The relevance of attraction and aversion factors in vocational education and training). Bonn.
- 15 See Mann, Anthony; Denis, Vanessa; Schleicher, Andreas; Ekhtiari, Hamoon; Forsynth, Terralynn; Liu, Elvin; Chambers, Nick (2020): Dream Jobs? Teenagers' Career Aspirations and the Future of Work (oecd.org/berlin/publikationen/Dream-Jobs.pdf).

Cliché Free Initiative

The Cliché Free Initiative (Initiative Klischeefrei), which was launched in 2016, aims to enable young people to find a career that fits their individual strengths and interests – regardless of gender stereotypes. By networking and providing skills development to individuals and institutions involved in career orientation, it seeks to break down gender clichés that can impact young people's choice of a career or study course. Almost 430 partner organisations have joined the initiative so far. Materials are made available for career orientation stakeholders, from early childhood educators to careers advisers.

Career orientation measures

Choosing a suitable occupation is a far-reaching decision for young people. The Federal Government supports young people before they enter working life by providing career orientation, such as the support services offered by the Federal Employment Agency and the Federal Government's vocational orientation programme, which includes a strong focus on providing vocational orientation at academic secondary schools (Gymnasien) and targeted efforts to address migrants. Over 300 education institutions and more than 3,000 schools all over Germany are partners in implementing this programme. Programmes run by the Länder also offer school students systematic career orientation.

As part of the lifelong careers guidance it offers, the Federal Employment Agency supports people in need of vocational advice and orientation, even after they have left school. From 2021, the Federal Employment Agency has expanded the careers guidance services it offers for people who are no longer school students. The aim is to persuade young people with no vocational qualifications to start vocational training, and thus train more skilled workers.

V. In the spotlight: analyses of the 2021 BA/BIBB survey of applicants regarding the group of applicants whose subsequent destination is unknown

Recently, greater attention has been devoted to young people's destinations after leaving general schools. Particularly in view of the pandemic-related restrictions on careers guidance and orientation, there is a growing focus on those young people who have broken off contact with the employment agencies and jobcentres and for whom no information is available on what they are now doing. According to Federal Employment Agency (BA) statistics, this was the case for 76,700 applicants in 2021.¹⁶

Statements about this group's post-application destinations can be made on the basis of data from the BA/BIBB survey of applicants. A recent BIBB analysis based on data from the 2021 BA/BIBB survey of applicants shows that the proportion of those outside the education system is comparatively high in this

group. For example, 12% of respondents stated that they were gainfully employed, while 8% were engaged in casual work. 32% were unemployed, seeking work, or not in the labour force.

A proportion of these adolescents and young adults (15%) did, however, succeed in making the transition to training which leads to a full qualification (including tertiary studies). At the time of the survey, a further 5% were attending a general school. 12% of the respondents were attending a course or measure leading to a partial qualification (vocational schools awarding partial qualifications, pre-vocational training programmes, internships, or similar).¹⁷ Further academic studies on young people's destinations after leaving general schools are now needed, including for a more precise analysis of the impacts of the coronavirus pandemic.

VI. Companies' participation in dual training

For the first time, this Report on Vocational Education and Training can draw on data on developments in companies' participation in vocational training during the coronavirus pandemic and the associated restrictions.

According to analyses carried out by the BIBB based on Federal Employment Agency employment statistics data, a total of 419,700 companies participated in the vocational training of adolescents and young adults in the 2020 reporting year. This represents a decline of 6,100 (–1.4%) compared to the previous year. The biggest fall in the number of companies providing training was recorded for micro-enterprises with up to ten employees. This correlates with the difficulties micro-enterprises face in recruiting applicants and filling training places, which have already been observed in recent years.¹⁸

The proportion of companies providing training, defined as the number of companies with trainees as a percentage of all companies with employees subject to

¹⁷ See the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 8.1.

See Eckelt, Marcus; Mohr, Sabine; Gerhards, Christian; Burkard, Claudia (2020): Rückgang der betrieblichen Ausbildungsbeteiligung: Gründe und Unterstützungsmaßnahmen mit Fokus auf Kleinstbetrieben (Decline in companies' participation in vocational training: reasons and support measures, focusing on micro-enterprises). Bonn.

social security contributions, remained almost stable at 19.4% in 2020, compared to the year before the pandemic (2019: 19.6%).

Since the beginning of the coronavirus pandemic, the Institute for Employment Research (IAB) has conducted panel surveys of companies at regular intervals, looking at how they are dealing with the coronavirus pandemic. At the end of 2020 (seventh wave of the survey), the vast majority of companies stated that, due to company-side constraints (e.g. financial problems, uncertain business outlook), they intended to reduce the number of new training contracts. However, as pandemic-related restrictions were lifted, the shortage of applicants was increasingly cited as a reason for reducing participation in training (17th wave).¹⁹

Based on BIBB analyses of training place advertisements from 2011 to 2019, it is likely that micro-enterprises and small and medium-sized companies, in particular, have already expanded their application routes to address their problems in filling training places. Application routes should be as low-threshold as possible and companies should respond promptly.²⁰

Especially during the pandemic, it is conceivable that companies may have increasingly embraced new, alternative methods of recruiting applicants, as in the case of micro-enterprises, in particular, persistent problems in filling training places could result in an involuntary reduction in participation in vocational training.

19 See Bellmann, Lutz; Ebbinghaus, Margit; Fitzenberger, Bernd; Gerhards, Christian; Gleiser, Patrick; Hensgen, Sophie; Kagerl, Christian; Kleifgen, Eva; Leber, Ute; Moritz, Michael; Roth, Duncan; Schierholz, Malte; Stegmaier, Jens; Umkehrer, Matthias (2021): Der Mangel an Bewerbungen bremst die Erholung am Ausbildungsmarkt (The shortage of applications is holding back the recovery in the training market), In: IAB-Forum, 18 November 2021 (iab-forum.de/der-mangel-an-bewerbungen-bremst-die-erholung-am-ausbildungsmarkt).

JOBSTARTER plus

Through the "JOBSTARTER plus" training market structure programme, the Federal Government funds and supports projects nationwide to develop practice-based training models and regional partnerships. The activities to support SMEs and microenterprises on issues involving digitalisation in initial and continuing training were expanded in 2019 to enable SMEs to better identify and make use of the potential of digital technologies in initial and continuing training, for example, when it comes to the marketing of training programmes. The first transfer projects were launched starting in mid-2021, with the aim of applying successful strategies for recruiting small and micro-enterprises to participate in vocational training in other regions or sectors.

Qualification initiative for digital transformation – Q 4.0

The "qualification initiative for digital transformation – Q 4.0" (Qualifizierungsinitiative Digitaler Wandel Q 4.0) involves the development of tailored skills development programmes for training personnel in order to suitably shape the content and processes of vocational training in the context of digital transformation. In this context, the focus is on instructional media skills, as well as technical and social skills. Training personnel learn how they can make productive use of digital media in vocational training and teach new technical content in a clear, modern way.

ASCOT+

ASCOT stands for "Technology-based Assessment of Skills and Competences in VET". The aim of the ASCOT+ research and transfer initiative is to develop digital learning and assessment instruments which can be used to promote and assess trainees' skills. Another aim is to provide digital tools to support examiners in setting assignments. To this end, the Federal Ministry of Education and Research is funding a total of six projects in the fields of industrial and technical occupations, commercial occupations, and healthcare occupations.

²⁰ See Ebbinghaus, Margit (2021): Welche Bewerbungswege bieten Betriebe Lehrstellensuchenden an? Analysen von Anzeigen für Ausbildungsstellen von 2011 bis 2019 (What application routes do companies offer people seeking training places? Analyses of advertisements for training places from 2011 to 2019). Bonn.

VII. Vocational training trajectories in the first year of the coronavirus pandemic: trend for premature training contract terminations and final exams

Based on vocational training statistics data, initial statements can be made about vocational training trajectories during the pandemic, in terms of premature training contract terminations and final exams. The statistics showed that training trajectories remained stable in the first year of the pandemic despite all of the challenges and uncertainties; by contrast, the number of higher education graduates, for example, fell significantly in 2020 (–6.0%).²¹

The premature training contract termination rate declined in 2020 compared to the previous year. In 2020, 25.1% of training contracts were terminated prematurely (2019: 26.9%). This is the first fall in the premature contract termination rate since 2015. The decline in the contract termination rate in 2020 does not appear to be attributable to structural developments, such as a reduction in the number of contracts with a high termination risk.

In other words, the first year of the coronavirus pandemic did not increase the likelihood of a training contract being terminated prematurely. Instead, it is clear that adolescents and young adults who were able to conclude a training contract and begin training during the pandemic did not face a higher risk of contract termination compared to the previous year.²² However, the vocational training statistics data does not provide any information about the destination of former trainees after the termination of their contracts, and so any pandemic-related impacts on those who drop out of training entirely cannot be captured.

No adverse impacts of the pandemic are visible in relation to final examinations, either. In 2020, a total of 424,200 final exams were registered (2019: 423,500). The pass rate for final exams as a proportion of all

candidates taking exams remained stable by comparison with 2019 (2020: 92.3 %; 2019: 92.8 %). The data shows that, despite challenging conditions in the pandemic, the usual number of final exams were taken in the dual training system, with a similar pass rate.

This is also a reflection of the dedicated efforts by all stakeholders involved in vocational education and training to ensure that vocational training could continue and final exams could be taken, without major obstacles where possible, despite the pandemic.

The Education Chains initiative

A successful start in training and work is an essential precondition for active participation in society. In the Education Chains initiative (Initiative Bildungsketten), the Federation, the Länder, and the Federal Employment Agency cooperate closely to ensure that young people's transition from school into training and work is as seamless as possible. To this end, the stakeholders coordinate their various support instruments relating to vocational training and the school-to-work transition in a structured and coherent way. During the first phase of the initiative, they succeeded in establishing effective career orientation instruments and structures based on strategies developed by the individual Länder. Talks have begun with all 16 Länder about new agreements with the aim of continuing the Education Chains initiative. Agreements have now been signed with most Länder for the new phase, which will cover the period to 2026.

The prevention of training dropouts initiative

Since 2008, the prevention of training dropouts initiative (Verhinderung von Ausbildungsabbrüchen – VerA) initiative has been supporting young people who are facing difficulties during training and who are considering dropping out. The young people receive professional and personal support, advice, and mentoring from senior experts, retired skilled staff, and management personnel with a great deal of professional and life experience, who are specifically prepared for their role.

²¹ See destatis.de/DE/Presse/Pressemitteilungen/2021/09/PD21_414_213.html.

²² See Uhly, Alexandra (2021): Ausbildungsverlauf unter Pandemiebedingungen: vorzeitige Vertragslösungen und Abschlussprüfungen in der dualen Berufsausbildung im Jahr 2020; deskriptive Analysen auf Basis der Berufsbildungsstatistik (Vocational training trajectories during the pandemic: premature contract terminations and final exams in the dual training system in 2020; descriptive analyses based on vocational training statistics data). Version 1.0. Bonn (lit.bibb.de/ vufind/Record/DS-779603).

VIII. Adults with no vocational qualifications

The absolute number of adults aged between 20 and 34 with no vocational qualifications²³ has been rising continuously since 2015 (2015: 1.90 million; 2020: 2.33 million). According to microcensus data, 15.5% of 20- to 34-year-olds had no vocational qualifications in 2020. The microcensus survey methodology underwent far-reaching changes in 2020; the Federal Statistical Office has therefore said that, from the 2020 reporting year, it is no longer possible to compare the percentage of unskilled workers with the percentages in previous years. In addition, the coronavirus pandemic meant that in-person surveys, among other things, were almost impossible in 2020. It is imperative to take this into consideration when interpreting the findings.²⁴

The percentage of unskilled workers varied a great deal depending on school-leaving certificate. Adults without a school-leaving certificate showed the highest percentage of unskilled workers (64.4%). The higher the level of a young person's school-leaving certificate, the less likely they are to be an unskilled worker when aged 20 to 34 (holders of a secondary general school certificate: 35.8%; of an intermediate school-leaving certificate: 13.3%; of a higher education entrance qualification: 7.4%).

Differences also existed between people with and without a migrant background. While 8.9% of German citizens without a migrant background were unskilled workers in 2020, the figure for migrants with direct experience of migration was 34.8%. 17.6% of people from a migrant background who were born and raised in Germany were unskilled workers.

Recognition of foreign professional qualifications

People with professional qualifications gained outside Germany can face challenges in verifying their qualifications. Instruments for recognising foreign professional qualifications can pave the way for holders of these qualifications to enter the labour market. These are supported by the "Integration through Qualification" programme run by the Federal Ministry of Labour and Social Affairs with funding from the European Social Fund (ESF). The programme provides advice on recognition and qualifications, and on skills development measures to compensate for significant differences with the German reference occupation.

Support for initial and continuing vocational training

In 2020, the Work of Tomorrow Act (Arbeit-vonmorgen-Gesetz) introduced a legal entitlement to funding for continuing training leading to a vocational qualification under Books II and III of the Social Code (Sozialgesetzbuch) for people with low-level qualifications; this also encompasses measures for the recognition of foreign professional qualifications which are certified under the accreditation and certification regulations for adult education. For the Federal Government, the Act fulfils an important commitment set out in the National Skills Strategy and sends an important signal of its efforts to improve workers' employability and secure the supply of skilled labour. The governing parties' coalition agreement contains a commitment to further strengthen and develop funding for continuing vocational training in the 20th electoral term, and to coordinate education and labour market policy instruments. Support for initial vocational training was also developed further by the Work of Tomorrow Act. Assisted Training has been updated, consolidated with assistance for trainees during training, and anchored in law as a permanent support instrument.

²³ People with no vocational qualifications, or "unskilled workers" (also referred to as "people without formal qualifications"), include, in this context, all people (capable of work) who do not have a qualification from a dual or school-based vocational training programme, or from studying at a university of applied sciences or higher education institution (or an equivalent qualification), as well as people who have undertaken informal on-the-job training (Anlernausbildung) or an internship. People who have not yet completed their education or training (school students, trainees, and university students) and those engaged in a voluntary service year are not counted as people with no vocational qualifications. The proportion of unskilled workers is defined as the number of people with no vocational qualifications as a percentage of all people in the relevant age cohort. (For more details, see the 2022 Data Report, Chapter A 11.1).

²⁴ For more details, see Federal Statistical Office 2021: Qualitätsbericht Mikrozensus 2020 (2020 Microcensus Quality Report).

People without formal qualifications tend to face particular challenges in the German labour market, which is geared towards formal qualifications. It is a greater challenge for these people to prove that they have qualifications and skills. In addition, people without formal qualifications are more likely to be affected by involuntary unemployment, and they are more likely to have to work in a lower-paid job.²⁵

People with professional qualifications gained outside Germany face similar challenges if their qualification is not recognised.

"Seize the opportunities!" (Chancen nutzen!), ETAPP, and BIBB-TQ

By implementing partial qualifications, the Federal Government is supporting the idea of adults being able to return to education and training to obtain vocational qualifications, up to the point of full vocational competence, in transparent, structured steps, building on their existing knowledge and skills. Partial qualifications, which are based on dual training occupations, are an opportunity for semi-skilled and unskilled people aged 25 and over to gain a recognised vocational qualification. This approach does not challenge the fundamental vocational training policy preference for traditional dual vocational training. The projects focus on developing consistent structural foundations and improving the data available on partial qualifications. With partial qualifications for the purpose of adaptive skills development, intersections with other forms of training for adults who do not have vocational qualifications and professional qualifications recognition instruments are also being investigated, with the aim of designing routes to second-chance education.

ValiKom Transfer

Building on the standardised processes for identifying, testing, assessing, and certifying non-formally and informally acquired vocational skills which were developed and trialled for selected occupations in the framework of the ValiKom project (validation of informally and non-formally acquired skills), the "Establishing competence centres to carry out validation processes for dual training occupations – ValiKom Transfer" initiative (Aufbau von Kompetenzzentren zur Durchführung von Validierungsverfahren für duale Berufe – ValiKom-Transfer) aims to open up these standardised processes to people without formal vocational qualifications and qualified people who want to change careers, and make them widely available.

IX. Upgrading skills and qualifications through vocational training

With the amendments of the Vocational Training Act (Berufsbildungsgesetz) with effect from 1 January 2020 and the Upgrading Training Assistance Act (Aufstiegsfortbildungsförderungsgesetz) with effect from 1 August 2020, steps have been taken specifically to strengthen vocational education and training to upgrade skills and qualifications. Vocational education and training opens up a wide range of attractive career opportunities equivalent to those offered by higher education.

According to the vocational training statistics published by the federal and Länder statistical offices, 78,300 people (34.7% of them women) successfully passed an advanced vocational training exam under the Vocational Training Act or the Crafts Code (Handwerksordnung) in 2020. This marks a significant fall of 13.3% in the number of advanced vocational training exams passed compared to the previous year.

²⁵ See Autorengruppe Bildungsberichterstattung (Authoring Group of the National Report on Education) (2020): Bildung in Deutschland 2020 (Education in Germany 2020), Chapter I 1. Bielefeld.

There are also indications that initial vocational training can have a positive impact on an individual's subsequent education and career. An as yet unpublished analysis produced by the BIBB based on National Educational Panel Study (NEPS) data (starting cohort: students; 2014/2015 wave) suggests that an initial vocational qualification has positive impacts when university graduates with a bachelor's degree make the transition to the labour market.²⁶ Graduates with a bachelor's degree who also had a vocational qualification transitioned to employment more quickly than those who did not have an initial vocational qualification. Half of the graduates who also had an initial vocational qualification entered employment no later than five months after graduating. The equivalent period was 16 months for graduates who did not have an initial vocational qualification. Moreover, graduates who had an initial vocational qualification were more likely to feel their job met their expectations in substantive terms.

It can be assumed that graduates with a bachelor's degree who also have an initial vocational qualification are more familiar with companies' recruitment and application processes, and possibly apply to jobs which are a better substantive fit with their own interests and knowledge. Graduates with a bachelor's degree who also have an initial vocational qualification were twice as likely to report that they had found their first job via their work prior to entering higher education. Consequently, initial vocational training could make the post-degree transition to the labour market easier because the individual has already gained experience of the world of work, and developed social networks which can be leveraged when looking for a job.

National Skills Strategy

The National Skills Strategy (Nationale Weiterbildungsstrategie) has for the first time established a long-term dialogue process covering all sectors and supported by the social partners in the area of continuing training policy. Creating a national continuing education and training culture is the stated aim of the National Skills Strategy, which the new coalition agreement explicitly commits to continuing, underpinned by many new structural measures to promote both vocational and non-vocational continuing education. A report on the state of play regarding implementation was published in June 2021. It documents what has been achieved and outlines fields of action for further enhancing the continuing education and training landscape in Germany. All 17 National Skills Strategy partners recommend the systematic continuation of the activities which have been launched and the advisory and dialogue processes. The updating of the National Skills Strategy is intended to further intensify the strategic coordination between the public sector and the social partners, business associations, and other stakeholders in society. The dialogue, rooted in trust, between the Federation and the Länder in the framework of the National Skills Strategy is also to be continued, particularly to ensure coherence in federal and Land support for vocational and general continuing education. The National Skills Strategy is thus making a key contribution to harnessing the opportunities of digital, demographic, and environmental change to benefit Germany.

²⁶ See Siembab, Matthias (2022): Akademisch Qualifizierte mit und ohne berufliche Erstausbildung – Übergänge in Erwerbstätigkeit (Academic graduates with and without an initial vocational qualification – transitions to employment). Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 10.4.1.

The Upgrading Training Assistance Act

With upgrading training assistance under the Upgrading Training Assistance Act (Aufstiegsfortbildungsförderungsgesetz), financial support is provided to people taking vocational upgrading training programmes leading to over 700 qualifications - for example, to qualify as a master craftsperson, technician, specialist, or early childhood educator - irrespective of their age. They receive a non-means-tested contribution to the course fees and, if it is a full-time programme, also receive a means-tested contribution to the cost of living. With the entry into force of the Fourth Act Amending the Upgrading Training Assistance Act on 1 August 2020, the assistance available was expanded to include all three levels of advanced vocational training introduced in the Vocational Training Act and the Crafts Code, thereby enabling people to upgrade their qualifications step by step to reach the "master level". In addition, the financial assistance has been substantially boosted by increasing the grant for course and exam fees and developing the maintenance allowance into a full grant; the transition to self-employment has also been made easier.

The InnoVET – Shaping the future – innovations for excellent vocational education and training innovation competition

The "InnoVET" innovation competition (InnoVET – Zukunft gestalten – Innovationen für eine exzellente berufliche Bildung) was established to develop, trial, and implement new approaches to initial and continuing training to make the vocational education and training system as a whole more attractive and qualitatively better. It focuses on the overall structures of dual training and advanced vocational training. The range of ideas developed in the collaborative projects extends from Industry 4.0 and electric mobility to smart home systems and new microtechnologies. The governing parties' coalition agreement contains a commitment to expanding InnoVET in the 20th electoral term.

Upskilling grant

The upskilling grant (Weiterbildungsstipendium) is aimed at young skilled workers under the age of 25 who have completed vocational training with particular success. They receive funding enabling them to participate in technical and interdisciplinary continuing training programmes, courses to prepare them for vocational upgrading training exams, or higher education courses designed for people in work. The upskilling grant thus supports talented employees starting out on their careers in upgrading their qualifications and discovering new career opportunities, including self-employment.

The INVITE innovation competition

"INVITE" is embedded in the National Skills Strategy and in the Digital Strategy established by the Federal Ministry of Education and Research. The competition was launched to develop innovative solutions to enable everyone to find – using AI technologies – the right continuing education programme for them via corresponding platforms. A total of 35 innovative projects are being funded to link existing continuing education platforms, to enhance the quality of these platforms, and to develop AI-assisted continuing education services. A meta-project brings together the competition's key findings - especially as regards standards for a digital continuing education space – in a systematic and thought-through manner. The "INVITE" innovation competition is thus making a key contribution to shaping a digital ecosystem for continuing education and training.

2 The training market situation in 2021

2.1 The applicant situation

2.1.1 Developments in school leaver numbers and outlook for the period to 2030

Demographic change has resulted in considerable falls in the number of school leavers leaving general schools in recent years. In 2020, around 115,400 fewer young people left general schools than did so ten years before (2010: 865,300; 2020: 749,900).

In 2020, 56,100 fewer young people left school with a secondary general school certificate (Hauptschulabschluss) than in 2010 (2010: 179,800; 2020: 123,700). 8,000 fewer people left a general school without a secondary general school certificate (2010: 53,100; 2020: 45,100). The number of school leavers with an intermediate school-leaving certificate (mittlerer Abschluss) fell by 17,900 (2010: 350,900; 2020: 333,000). The fall in the number of school leavers with a higher education entrance qualification was 33,500 (2010: 281,600; 2020: 248,100). This comparatively steep decline in the number of people entitled to enter higher education was caused by the lower number of school leavers with a higher education entrance qualification in 2020, with the return to a nine-year Abitur (higher education entrance qualification) in Lower Saxony playing a role in this context.

On the whole, a trend towards higher-level school-leaving qualifications is visible. The percentage of those leaving school after gaining a secondary general school certificate fell from 20.8% in 2010 to 16.5% in 2020. Growth was recorded in the number of those leaving school after gaining an intermediate school-leaving certificate (2010: 40.5%; 2020: 44.4%) and those leaving with a higher education entrance qualification (2010: 32.5%; 2020: 33.1%). This trend becomes even more evident when 2000 is taken as the basis for comparison (2000: secondary general school certificate: 25.1%, intermediate school-leaving certificate: 39.9%, higher education entrance qualification: 25.7%).

According to a recent prognosis made by the Federal Institute for Vocational Education and Training (BIBB), based on the forecast of school student and school leaver numbers made by the Conference of Ministers of Education and Cultural Affairs (KMK)²⁷, the number of school leavers will fluctuate somewhat in the coming years. It will be higher in the years from 2021 to 2024 than it was in 2020. It is expected to fall to its lowest point in 2026 (724,100)²⁸ before rising again to 808,900 by 2030. The number of school leavers will then be higher than in 2020 (749,900) but still well below school leaver numbers in earlier years (see **Chart 1**).

This prognosis shows that securing a supply of skilled workers in future will pose a challenge.

2.1.2 Demand for dual training under the Vocational Training Act and Crafts Code

In the 2020/2021 reporting year, 433,543 applicants across Germany used the services of the employment agencies and jobcentres in their search for a training place, 39,438 (–8.3%) fewer than in the year before. By comparison with 2019, the year before the pandemic, there were 78,256 (–15.3%) fewer applicants registered. Once again, far more men (268,518) than women (164,986) were registered as applicants in 2021. The number of women is falling somewhat more sharply than the number of men.

²⁷ See Conference of Ministers of Education and Cultural Affairs (Kultusministerkonferenz) (2021): Vorausberechnung der Schülerund Absolventenzahlen 2019 bis 2035 (Forecast of the number of school students and school leavers from 2019 to 2035) (Documentation no. 230 of 11 November 2021). Berlin: KMK (kmk.org/ dokumentation-statistik/statistik/schulstatistik/vorausberechnungder-schueler-und-absolventenzahlen.html).

²⁸ In particular, the number of school leavers with a higher education entrance qualification will fall. This is connected to the return to the nine-year Abitur.

A No secondary general school certificate C Intermediate school-leaving certificate B With secondary general school certificate D Higher education entrance qualification 450,000 400,000 346.693 333,039 350,000 300,000 281,608 248,148 250,000 200,000 132.174 123,687 150,000 В 100,000 48,413 45.072 50,000 0 1992 1995 2000 2005 2010 2015 2020 2025 2030

Chart 1: Developments in numbers of school leavers leaving general schools, 1992 to 2030²⁹

Sources: Federal Statistical Office (2021): Bildung und Kultur. Allgemeinbildende Schulen. Schuljahr 2020/2021 (Education and culture. General schools. 2020/2021 school year). Wiesbaden: Statistisches Bundesamt. – Conference of Ministers of Education and Cultural Affairs (KMK) (2021): Vorausberechnung der Schüler- und Absolventenzahlen 2020 bis 2035 (Forecast of the number of school students and school leavers from 2020 to 2035) (Documentation no. 230). Berlin: KMK.

The Federal Employment Agency attributes the fall in the number of applicants to the pandemic, stating that since there has been a recent rise in the number of young people leaving general schools, 30 there is no connection to demographic trends. It reports that many people did not register due to restrictions on the usual ways of accessing careers guidance, which could not be fully replaced by digital services. It is therefore likely that the number of registered applicants does not fully represent the actual level of interest in vocational training. It also seems reasonable to suspect that some young people (temporarily) with-

drew from the dual training market and decided from the outset to pursue alternatives, such as remaining in school. 31

Table 1 shows registered applicants for the years 2019 to 2021, categorised by gender, age, nationality, school-leaving qualification, and the type of school they attended. More detailed information (including time series) on the subsequent destinations of applicants registered with the Federal Employment Agency can be found in **Chapter 2.4.2**.

²⁹ Where not provided here, data segregated by gender for this and other charts and tables is available in the Data Report accompanying the Report on Vocational Education and Training and publications produced by the Conference of Ministers of Education and Cultural Affairs.

³⁰ See **Chapter 2.1.1**.

See Federal Employment Agency (Bundesagentur für Arbeit), Statistik/Arbeitsmarktberichterstattung, Berichte: Blickpunkt Arbeitsmarkt – Situation am Ausbildungsmarkt (Statistics/Labour Market Reporting, Reports: Labour Market Overview – Training Market Situation), Nuremberg, November 2021 (statistik arbeitsagentur.de/DE/Statischer-Content/Statistiken/Fachstatistiken/ Ausbildungsmarkt/Generische-Publikationen/Blickpunkt-Arbeitsmarkt-Ausbildungsmarkt20-21.pdf).

Table 1: Applicants registered for dual vocational training

				2021 compa	2021 compared to 2020	2021 compared to 2019	red to 2019	Percentage	Percentage of all registered applicants	policants
	2019	2020	2021	absolute	% ui	absolute	% ui	2019	2020	2021
Total applicants	511,799	472,981	433,543	-39,438	-8.3	-78,256	-15.3	100.0%	100.0%	100.0%
Gender										
Men	313,044	290,691	268,518	-22,173	-7.6	-44,526	-14.2	61.2%	61.5 %	61.9%
Women	198,742	182,272	164,986	-17,286	-9.5	-33,756	-17.0	38.8%	38.5 %	38.1%
Age										
Under 20 years old	329,943	302,402	267,099	-35,303	-11.7	-62,844	-19.0	64.5 %	63.9 %	61.6%
20 to under 25 yers old	144,247	135,325	131,733	-3,592	-2.7	-12,514	-8.7	28.2 %	28.6%	30.4%
25 years old and older	37,599	35,252	34,708	-544	-1.5	-2,891	7.7-	7.3 %	7.5 %	8.0%
Nationality*										
German	420,841	390,205	353,614	-36,591	-9.4	-67,227	-16.0	82.2%	82.5%	81.6%
Not German	90,956	82,775	79,928	-2,847	-3.4	-11,028	-12.1	17.8 %	17.5 %	18.4%
Of whom from a forced migration background	38,113	33,184	31,081	-2,103	-6.3	-7,032	-18.5	7.4 %	7.0%	7.2 %
School-leaving qualification										
No secondary general school certificate	8,532	7,589	6,883	-706	-9.3	-1,649	-19.3	1.7 %	1.6%	1.6%
With secondary general school certificate	138,234	127,445	121,951	-5,494	-4.3	-16,283	-11.8	27.0%	26.9%	28.1%
Intermediate school-leaving certificate	204,089	191,656	173,668	-17,988	-9.4	-30,421	-14.9	39.9%	40.5 %	40.1%
Entrance qualification for universities of applied sciences	67,962	61,674	56,062	-5,612	-9.1	-11,900	-17.5	13.3 %	13.0%	12.9%
General higher education entrance qualification	68,256	59,405	50,173	-9,232	-15.5	-18,083	-26.5	13.3 %	12.6%	11.6%
No information available	24,726	25,212	24,806	-406	-1.6	80	0.3	4.8 %	5.3 %	5.7 %
School attended										
General school	240,612	224,671	203,884	-20,787	-9.3	-36,728	-15.3	47.0%	47.5%	47.0%
Vocational school	199,285	189,749	179,513	-10,236	-5.4	-19,772	-9.9	38.9%	40.1%	41.4%
Higher education institutions and academies	27,918	23,739	21,336	-2,403	-10.1	-6,582	-23.6	8.5%	2.0%	4.9 %
Other forms	36,842	28,316	22,565	-5,751	-20.3	-14,277	-38.8	7.2 %	% 0.9	5.2 %
No information available	7,142	6,506	6,245	-261	-4.0	-897	-12.6	1.4%	1.4%	1.4 %
		71 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		F 7	(0010)					

Source: Federal Employment Agency statistics; calculations by the Federal Institute for Vocational Education and Training (BIBB).

* The way in which non-German nationals are counted has changed compared to previous reports. Stateless persons and people for whom no information on nationality is available are no longer included under "No information available" in the Federal Employment Agency's statistics; they are now counted as "non-German nationals".

Regarding applicants' schooling background, applicants with a higher education entrance qualification recorded the sharpest fall in relative terms (–15.5% compared to 2020). It is important to continue to monitor this trend for signs of a possible "coronavirus effect" impacting the attractiveness of dual vocational training for this target group.

A total of 79,928 (18.4%) of the registered applicants were foreign nationals. This number fell less steeply compared to the previous year (-3.4%) than the number of applicants who were German nationals (-9.4%).

Companies and young people looking for training places are free to choose whether or not to use the services offered by the employment agencies. According to analyses carried out by the BIBB, in recent years around two-thirds of all those who were institutionally recorded as being interested in training³² registered as applicants (2019: 65.0%, 2020: 65.3%). In 2021, the percentage fell to 61.3%.

Under section 86 (2) of the Vocational Training Act (Berufsbildungsgesetz), demand for training is calculated based on the number of newly concluded training contracts ("realised demand") plus the number of people registered in the Federal Employment Agency statistics as still looking for a training place.

Demand as traditionally defined was 497,677 in 2021, 843 (+0.2%) more than in 2020. By comparison with 2019 (549,563), demand fell by 51,886 (-9.4%).

The traditional definition of demand does not fully capture the number of young people seeking training, however. The Report on Vocational Education and Training and the National Education Report³³ therefore also make use of an expanded definition of demand, which, besides newly concluded training contracts (2021: 473,063) and unplaced applicants (2021: 24,614), also includes applicants with an alternative on 30 September who still wanted to be placed in training (2021: 43,204). Using this expanded definition, demand

in 2021 was 540,881 people, 4,841 fewer (-0.9%) than in 2020 and 57,878 fewer (-9.7%) than in 2019. 2019 marked the first time that demand based on the expanded definition fell below 600,000, to 598,759.

In 2017 and 2018, demand for dual vocational training places rose temporarily. This was partly due to the fact that more applicants from a forced migration background were coming into the training place market, which compensated for declining demand due to demographic change. However, the number of refugees among applicants registered with employment agencies and jobcentres did not rise further in 2019 (2018: 38,299; 2019: 38,113). In 2020, it fell by 4,929 (–12.9%) to 33,184. In 2021, 31,081 applicants from a forced migration background were registered (–2,103 or –6.3% compared to 2020). The refugees were mainly men (22,411 or 72.1%); 8,670 (27.9%) were women. The proportion who are women has risen in recent years (2019: 20.1%; 2020: 24.6%).

Given the need to secure the future supply of skilled labour, this decline in demand represents a significant challenge.

Previously unsuccessful training applicants

Of the 433,543 applicants registered nationwide in 2021, 183,239 had already applied for a training place in at least one of the past five reporting years, 659 (-0.4%) fewer than in 2020.

Relative to all registered applicants, the proportion of applicants from earlier reporting years has grown in recent years. This is equally true at the national level (2019: 36.5 %; 2020: 38.9 %; 2021: 42.3 %), in western Germany (2019: 36.4 %; 2020: 38.8 %; 2021: 42.4 %) and in eastern Germany (2019: 37.0 %; 2020: 39.2 %; 2021: 41.6 %). ³⁴ This too is believed to be linked to the pandemic and the measures taken to contain it.

Table 2 shows developments in the number of applicants from earlier reporting years nationwide and in eastern and western Germany.

In interpreting the data, it must be noted that the Federal Employment Agency classifies people in annual categories according to when they were last

³² See Chapter 2.3.2.

³³ See Autorengruppe Bildungsberichterstattung (Authoring Group of the National Report on Education) (2020): Bildung in Deutschland 2020. Ein indikatorengestützter Bericht mit einer Analyse zu Bildung in einer digitalisierten Welt (Education in Germany 2020. An indicator-based report analysing education in a digitalised world). Bielefeld.

³⁴ For a longer time series for the proportion of applicants from previous years, see the Report on Vocational Education and Training 2020.

Table 2: Applicants from earlier reporting years

	Total	Who were applicants in the past	Who were applicants 1 or 2 years	Of whom we	re applicants	Applicants in the past 5 years before the reporting year compared with the previous year				
		5 reporting years	before the reporting year	1 year before the reporting year	2 years before the reporting year	Absolute	Relative			
Nationwid	e									
2016	547,728	185,150	170,862	147,907	22,955	-335	-0.2			
2017	547,824	183,727	169,875	147,664	22,211	-1,423	-0.8			
2018	535,623	189,234	174,972	148,041	26,931	5,507	3.0			
2019	511,799	186,820	170,074	143,424	26,650	-2,414	-1.3			
2020	472,981	183,898	162,807	135,817	26,990	-2,922	-1.6			
2021	433,543	183,239	159,758	134,341	25,417	-659	-0.4			
Western Germany										
2016	454,688	154,607	143,509	124,497	19,012	-459	-0.3			
2017	457,722	154,109	143,143	124,642	18,501	-498	-0.3			
2018	445,201	158,095	146,832	124,549	22,283	3,986	2.6			
2019	425,089	154,856	141,505	119,229	22,276	-3,239	-2.0			
2020	392,382	152,368	135,052	112,455	22,597	-2,488	-1.6			
2021	356,201	151,028	132,003	110,810	21,193	-1,340	-0.9			
Eastern Ge	rmany									
2016	90,552	30,401	27,213	23,275	3,938	298	1.0			
2017	89,730	29,513	26,637	22,929	3,708	-888	-2.9			
2018	90,144	31,071	28,079	23,437	4,642	1,558	5.3			
2019	86,224	31,899	28,514	24,146	4,368	828	2.7			
2020	80,068	31,396	27,627	23,242	4,385	-503	-1.6			
2021	76,789	31,949	27,501	23,286	4,215	553	1.8			

Source: Federal Employment Agency statistics, special analysis made in preparation for the Report on Vocational Education and Training.

registered as applicants, so it is not possible to state whether a person who was last registered as an applicant one year before the reporting year also sought a training place with support from an employment agency or jobcentre in earlier years. Likewise, the fact that a person was last recorded as an applicant some time ago does not mean that they have been unsuccessfully looking for a training place over the whole intervening period.

Findings on unplaced applicants from earlier years from the BA/BIBB survey of applicants

The BA/BIBB survey of applicants records young people as previously unsuccessful training applicants when they state that they have applied for a training place in the past, regardless of whether they were

registered with an employment agency or jobcentre as a training place applicant at that time.

Using data from BA/BIBB surveys of applicants carried out from 2006 to 2016, the BIBB assessed the training prospects of unplaced applicants from earlier years, comparing figures over that period. It found that the proportion of previously unsuccessful applicants, relative to all registered applicants, declined steeply between 2006 and 2016 (2006: 40%; 2016: 27%), and in 2018 this figure fell further (2018: 25%). The 2020 BA/BIBB survey of applicants showed a small rise in the proportion of unplaced

³⁵ For more details, see the Report on Vocational Education and Training 2019, Chapter 2.4.2, and the Data Report accompanying the Report on Vocational Education and Training 2019, Chapter A 8.1.3.

applicants from earlier years, to 26%. This figure remained constant at 26% in 2021.

The results of the BA/BIBB surveys of applicants have also showed that previously unsuccessful training applicants form a very heterogeneous group, with some having good and some having very poor prospects of being placed in training. The longer ago the applicant left school, the lower the grades on their school-leaving certificate, and the older the applicant is, the less likely they are to be placed in training in a company.

2.1.3 Developments in the transition sector and the transition into training

Not all school leavers succeed in making the transition into training straight after leaving a general school. As well as enabling young people to achieve the maturity they need for training and occupying them during periods without a vocational training place, transition sector measures offer them an opportunity to return to education to gain a school-leaving qualification or to improve their earlier school-leaving results.

According to the results of the 2021 iABE Interim Report³⁶, the number of new entrants in the transition sector in 2021, at around 228,100, was lower than in the previous year (-6,500 or -2.8%; see **Table 3**).³⁷ Compared with 2019, the year before the start of the pandemic, the transition sector recorded a decline of 21,800 (-8.7%) people. This trend is partly attributable to the decline in the number of school leavers from general schools (-3.0% between 2019 and 2021).³⁸ There are also signs that young people are staying in the general school system for longer due to the coronavirus pandemic and are seeking higher-level school-leaving qualifications, with the "acquisition of a higher education entrance qualification" sector

The trajectory of developments in the transition sector since 2005 (see also Chapter 2.3.1) initially shows a continuous decline in the number of people being placed in this sector between 2005 and 2014. However, in 2015 and 2016, the number of new entrants in the transition sector rose again significantly. This rise was mainly due to the growing number of refugees who were being placed in German language learning programmes in the transition sector, in particular.41 Between 2016 and 2021, the number of young people placed in the transition sector once again fell continuously (-24.7%). The number of young foreign nationals who were being placed in transition sector measures fell significantly over this period, by around 38%. This trend is due both to the decline in the number of refugees arriving in Germany in this period, and the increasing placement of young refugees in vocational training.42

New entrants in the transition sector by selected characteristics

Fewer young women (39.0%) than young men began a transition sector measure in 2021 (2020: 38.9%). Areas where women made up a high proportion of new

recording a rise in new entrants (+1.2%) compared to 2019. Furthermore, the pandemic has resulted in fewer young people registering for careers guidance or placement in training, as the usual means of accessing these services were restricted.³⁹ It can be assumed that this also led to fewer young people being placed in transition sector measures. In addition, it must be taken into account that a slight increase in the unemployment rate for young people (aged 15 to under 25 years old) was observed in the reporting period (from 4.4% in 2019 to 4.9% in 2021).⁴⁰

³⁶ For the 2020 reporting year, there are discrepancies with the information provided in the Report on Vocational Education and Training 2021. It drew mainly on an estimate produced by the Federal Institute for Vocational Education and Training (BIBB) based on the 2020 iABE Interim Report, as the published Interim Report data was not entirely reliable last year (see also Chapter 2.3.1).

³⁷ Due to revisions in the data, there are discrepancies with earlier data.

³⁸ See Conference of Ministers of Education and Cultural Affairs (Kultusministerkonferenz) (2021): Vorausberechnung der Schülerund Absolventenzahlen 2020–2035 (Forecast of the number of school students and school-leavers from 2020 to 2035) (Documentation no. 230 of November 2021), general schools.

See Federal Employment Agency (Bundesagentur für Arbeit) (2021): Berichte: Blickpunkt Arbeitsmarkt – Situation am Ausbildungsmarkt (Reports: Labour Market Overview – Training Market Situation) (November 2021).

⁴⁰ See Federal Employment Agency statistics (2022): Arbeitslose nach Rechtskreisen (Unemployed persons by jurisdiction) (annual figures, 2021 reporting year).

⁴¹ See press release by the Federal Statistical Office of 10 March 2017 (destatis.de/DE/PresseService/Presse/Pressemitteilungen/2017/03/ PD17_087_212.html).

⁴² See Chapter 2.4.5 and, for further details, the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 5.8 and A 12.

Table 3: Trend in new entrant numbers in the transition sector

	2005	 2010	 2015	2016	2017	2018	2019	2020	2021*
Sector: Integration into training (transition sector)	417,649	316,494	266,190	302,880	283,140	263,930	249,980	234,620	228,140
General programmes at full-time vocational schools (fulfilling school attendance obligations and gaining lower secondary qualifications)	68,095	54,180	22,552	25,919	20,108	20,142	20,001	21,207	18,594
Courses at full-time vocational schools that offer basic vocational training that can be accredited	58,706	47,479	47,355	47,017	47,889	47,586	47,610	50,405	48,994
Basic vocational training year (full-time/school-based)	48,581	30,620	6,285	5,957	5,868	5,715	5,634	4,550	4,565
Courses at full-time vocational schools that offer basic vocational training without accreditation	29,106	24,790	41,355	41,652	43,663	42,552	39,771	39,333	41,044
Basic vocational training year including one-year introductory vocational classes	58,432	40,661	72,450	108,494	94,123	80,856	75,798	64,360	65,702
Courses at vocational schools for students with no training contract who are employed or unemployed	27,035	19,186	17,370	13,781	12,800	12,447	12,147	9,435	7,764
Courses at vocational schools for students with no training contract who are studying for a general lower secondary school-leaving qualification	13,477	6,808	400	280	312	474	510	427	314
Mandatory internships before training as an early childhood educator at a vocational school	3,525	3,854	3,829	3,594	3,665	3,615	3,321	3,200	2,991
Federal Employment Agency pre-vocational measures	91,811	69,933	44,760	44,020	41,560	39,620	36,450	34,820	32,680
Federal Employment Agency introductory training	18,881	18,983	9,840	12,170	13,150	10,930	8,730	6,900	5,480

^{*} Preliminary data from the 2021 iABE Interim Report.

Sources: Federal Statistical Office, iABE 2020 (data as at 17 December 2021); 2021 iABE Interim Report (data as at 16 March 2022).

entrants included, in particular, "mandatory internships before training as an early childhood educator at a vocational school" (84.6%) and "general programmes at full-time vocational schools (to fulfil school attendance obligations and gain lower secondary qualifications)" (49.0%). The "basic vocational training year" recorded the highest percentage of young male trainees (80.3%), followed by "courses at vocational schools for students with no training contract who are studying for a general lower secondary school-leaving qualification" (72.9%).

In 2021, the proportion of foreign nationals in the transition sector was 29.8%, slightly higher than in the previous year (2020: 29.2%). The percentage of foreign nationals among young men placed in transition sector measures, at 30.3%, was somewhat higher in 2021 than in the case of young women (29.0%). Non-German nationals were most commonly represented among new entrants in a "basic vocational training year including one-year introductory vocational classes" (49.6%) and in "Federal Employment Agency introductory training" (35.6%).

A No secondary general school certificate C Intermediate school-leaving qualification or equivalent E Other schooling background/ No information B Secondary general school certificate D Higher education entrance qualification R CD F Α Sector: Integration into training (transition sector) General programmes at full-time vocational schools (fulfilling school attendance obligations and gaining lower secondary qualifications) Courses at full-time vocational schools that offer basic vocational training that can be accredited Basic vocational training year (full-time/school-based) Courses at full-time vocational schools that offer basic vocational training without accreditation Basic vocational training year including one-year introductory vocational classes Courses at vocational schools for students with no training contract who are employed or unemployed Courses at vocational schools for students with no training contract who are studying for a general lower secondary school-leaving qualification Mandatory internships before training as an early childhood educator at a vocational school Pre-vocational measures (Federal Employment Agency) Introductory training (Federal Employment Agency) 0 % 10 % 20 % 30 % 40 % 50 % 60 % 70 % 80 % 90 % 100 %

Chart 2: Schooling background of new entrants in the transition sector in 2020

Source: Federal Statistical Office, iABE 2020.

The transition sector offers young people an opportunity to improve their individual chances of gaining training, so it is not surprising that most young people in the transition sector have relatively low-level or no school-leaving qualifications. In 2020,⁴³ young people with a secondary general school certificate accounted for the largest share of people in the transition sector, at 45.3%. 26.4% did not have a secondary general school certificate. However, 21.1% of the young people had an intermediate school-leaving certificate or equivalent qualification. At 1.8%, young people with a higher education entrance qualification make up a very small proportion of the transition sector (see **Chart 2**).

Young people with a higher education entrance qualification were represented at above-average levels in the "basic vocational training year" (11.9%) and "introductory training" (8.4%). Young people without a secondary general school certificate were especially often in a "basic vocational training year including one-year introductory vocational classes" (63.5%) and in "courses at vocational schools for students with no training contract who are employed or unemployed" (30.9%).

⁴³ Differentiated data on schooling background is not yet available for 2021

Table 4: Registered vocational training places

	Natio	onwide	Western	Germany	Eastern Germany			
			Registered vocation	onal training places				
	Total	Of which in a company	Total	Of which in a company	Total	Of which in a company		
2009	483,798	426,384	387,817	355,761	95,077	69,779		
2016	546,093	526,611	456,461	441,656	89,454	84,780		
2017	544,907	527,470	456,533	443,515	88,230	83,811		
2018	565,342	546,576	474,519	460,173	90,659	86,239		
2019	571,982	556,041	480,734	469,323	91,090	86,560		
2020	530,265	514,571	445,953	434,383	84,158	80,034		
2021	511,282 496,835		427,664 417,246		83,479	79,450		
2021 compared to	2020							
Absolute	-18,983	-17,736	-18,289	-17,137	-679	-584		
in%	-3.6	-3.4	-4.1	-3.9	-0.8	-0.7		
2021 compared to	2019							
absolut	-60,700	-59,206	-53,070	-52,077	-7,611	-7,110		
in%	-10.6	-10.6	-11.0	-11.1	-8.4	-8.2		

The time series for 2010 to 2015 can be found in the Report on Vocational Education and Training 2020. Source: Federal Employment Agency statistics.

2.2 The supply of training places

2.2.1 Training places offered under the Vocational Training Act and Crafts Code

For the 2020/2021 reporting year, the Federal Employment Agency's statistics record a total of 511,282 registered vocational training places. That represents a decline of 18,983 (–3.6%) in relation to 2020. By comparison with 2019, the number of registered places fell by 60,700 (–10.6%). 496,835 of the registered places were in companies (see **Table 4**).

For around half of the registered training places in 2021, applicants had to have a secondary general school certificate (255,304 places or 49.9%), while for 173,412 places (33.9%) at least an intermediate school-leaving certificate was expected. An entrance qualification for universities of applied sciences was the minimum requirement for applicants for 32,551 (6.4%) of the registered training places, while a general higher education entrance qualification was the prerequisite for 4,398 (0.9%) of the registered training places. Employers stated that for 845 (0.2%)

registered training places they would not require applicants to have a secondary general school certificate. "Not relevant" or "Not specified" applied to 44,772 (8.8%) of the training places registered.⁴⁴

The Federal Employment Agency has drawn attention to the fact that the recorded number of registered vocational training places is somewhat lower than it should be due to a processing error.⁴⁵ It believes that

⁴⁴ For a comparison of the school-leaving qualifications expected of applicants for unfilled training places and the school-leaving qualifications of registered applicants still seeking training, see Chapter 2.4.1.

⁴⁵ According to the Federal Employment Agency, this affects vocational training places where the preferred start date for the training was delayed until the new reporting year. For example, if a training place was still unfilled in September 2021 and the employer decided not to recruit anyone at that point and instead wait until the next start date for vocational training in September 2022, the preferred start date could be changed in the VerBIS system. From a statistical perspective. the correct approach would be to count the training place both in the (then) current reporting year of 2020/2021 and in the new reporting year of 2021/2022. However, due to the processing error, the registered place was only recorded for the new reporting year. This tends to lead to under-reporting of training places in the first reporting year. The number of unfilled vocational training places is not affected by the processing error. See Federal Employment Agency (Bundesagentur für Arbeit), Statistik/Arbeitsmarktberichterstattung, Grundlagen: Hintergrundinfo - Statistik über gemeldete Berufsausbildungsstellen – Unterzeichnung aufgrund eines

the number of vocational training places not included in these figures is likely to be an average of 1% to 2% of the training places reported nationwide. That is equivalent to up to 12,000 registered vocational training places in 2020/2021. Steps are being taken to ensure the processing error is eliminated for the next reporting year. The data on registered training places will then be corrected retroactively.

In the context of registered vocational training places, it should be noted that, just as in the case of registered applicants, companies and young people are free to choose whether or not they want to make use of the services offered by employment agencies and jobcentres.

In line with section 86 of the Vocational Training Act (Berufsbildungsgesetz), the total number of training places in the training market is calculated by taking the number of newly concluded training contracts (i. e. successfully filled training places) recorded in the BIBB survey carried out on 30 September (2021: 473,063) and adding the number of still unfilled training places registered with the Federal Employment Agency (2021: 63,176). As the processing error does not affect the number of unfilled vocational training places, it has no impact on the number of training places reported here.

In 2021, a total of 536,239 vocational training places were registered nationwide, which is an increase of 8,806 (+1.7%) compared to the previous year. However, the number of training places available remained well below (-41,936 or -7.3%) the figure in 2019, the year before the pandemic, when 578,175 vocational training places were recorded.

More details on the development of the supply of training places are provided in **Chapter 2.3.2** in connection with the findings of the BIBB survey of newly concluded training contracts on 30 September.

2.2.2 Companies' participation in training

In the 2020 reporting year, 419,683 companies provided vocational training for adolescents and young adults.⁴⁶ By comparison with 2019, the number of companies providing training fell by 6,098 (–1.4%). The proportion of companies providing training⁴⁷ was 19.4% (2019: 19.6%).

The relatively small decline in the proportion of companies providing training is due to the fact that the total number of companies also fell. There were 2,163,494 companies in total, 7,940 (-0.4%) fewer than in 2019. The total number of companies had grown in the preceding years. The BIBB analyses reach these findings based on data from Federal Employment Agency employment statistics.

As in previous years, the rates of company participation in training varied depending on the company's size.

Micro-enterprises (1 to 9 employees) saw the largest fall in companies providing training (-5,766 or -3.2%) in 2020. The total number of micro-enterprises also declined in 2020 (-7,360 or -0.4%), but this was less sharp than the fall in the number of companies providing training. The proportion of micro-enterprises providing training declined from 11.0% to 10.7%.

These figures continued the trend observed in recent years that micro-enterprises are the source of reductions in the number of companies providing training. This development also correlates with the difficulties that micro-enterprises have in filling training places (see **Chapter 2.4.1**). The proportion of companies providing training is defined as companies with trainees as a percentage of all companies with employees subject to social security contributions, so only those companies that succeeded in filling the

Verarbeitungsfehlers (Statistics/Labour Market Reporting, Basics: Background information – Statistics about registered vocational training places – Notification regarding a processing error), Nuremberg, November 2021 (statistik.arbeitsagentur.de/DE/Statischer-Content/Statistiken/Fachstatistiken/Ausbildungsmarkt/Generische-Publikationen/Hintergrundinfo-Berufsausbildungsstellen-Unterzeichnung.pdf).

⁴⁶ In contrast to the situation concerning many other figures, current data on companies' participation in training is available only for 2020; in other words, this data only covers the first year of the pandemic. Information for 2021 will be provided in the Report on Vocational Education and Training 2023.

⁴⁷ The proportion of companies providing training is defined as companies with trainees as a percentage of all companies with employees subject to social security contributions, including the companies providing training. When calculating the proportion of companies providing training, no distinction is made between companies which do and do not meet the requirements to provide training. See the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 7.1.

Table 5: Companies, companies providing training, and percentages of companies providing training

	2009		2015	2016	2017	2018	2019	2020
Micro-enterprises (1-9 employees)								
Total companies	1,653,446		1,675,301	1,675,052	1,674,337	1,669,463	1,667,221	1,659,861
► Number providing training	263,294		200,340	195,789	192,157	187,759	182,981	177,215
► Percentage providing training	15.9		12.0	11.7	11.5	11.2	11.0	10.7
Small companies (10-49 employees)								
Total companies	320,398		362,321	371,081	379,505	386,673	393,112	392,998
► Number providing training	153,366		157,099	159,011	161,952	164,742	166,926	166,976
► Percentage providing training	47.9		43.4	42.9	42.7	42.6	42.5	42.5
Medium-sized companies (50-249 employees)								
Total companies	76,141		86,560	88,896	91,162	93,009	94,113	93,751
► Number providing training	52,799		57,440	58,625	59,880	61,164	61,967	61,676
► Percentage providing training	69.3		66.4	65.9	65.7	65.8	65.8	65.8
SMEs (1-249 employees)								
Total companies	2,049,985		2,124,182	2,135,029	2,145,004	2,149,145	2,154,446	2,146,610
► Number providing training	469,459		414,879	413,425	413,989	413,665	411,874	405,867
► Percentage providing training	22.9		19.5	19.4	19.3	19.2	19.1	18.9
Large companies (250 employees and	above)							
Total companies	13,723		15,524	15,987	16,403	16,759	16,988	16,884
► Number providing training	11,676		12,617	12,950	13,238	13,622	13,907	13,816
► Percentage providing training	85.1		81.3	81.0	80.7	81.3	81.9	81.8
All companies (total)								
Total companies	2,063,708		2,139,706	2,151,016	2,161,407	2,165,904	2,171,434	2,163,494
► Number providing training	481,135		427,496	426,375	427,227	427,287	425,781	419,683
► Percentage providing training	23.3		20.0	19.8	19.8	19.7	19.6	19.4

The time series for 2010 to 2014 can be found in the Report on Vocational Education and Training 2020. Source: Federal Employment Agency employment statistics (reference date: 31 December), BIBB calculations.

training places they offered are recorded as companies providing training.

In the case of small companies (10 to 49 employees), the number of companies providing training was the same as the year before (+50 or +0.0%). The proportion of companies providing training also remained constant at 42.5%.

Unlike in the preceding years, when reductions in the number of companies providing training were solely attributable to falls among micro-enterprises, 2020 also saw a small decline in the number of mediumsized companies (-291 or -0.5%) and large companies⁴⁸

(-91 or -0.7%) providing training.⁴⁹ However, as the total number of companies in these size classes underwent a similar decline, there was no or only a minimal change in the proportion of companies in these size classes providing training.

Table 5 shows a time series of the trends in company numbers, the number of companies providing training, and the percentages of companies providing training.

⁴⁸ The fall is attributable to large companies with 250 to 499 employees (-1.4%). In the case of companies with 500 or more employees, the

number of companies providing training rose slightly (+0.5 %); see the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 7.1.

⁴⁹ The "All SMEs" figures shown in **Table 5** include micro-enterprises, small companies, and medium-sized companies, and thus also reflect the decline for micro-enterprises.

In western Germany, the number of companies providing training fell (2019: 363,914; 2020: 357,758). The total number of companies was also slightly below the previous year's level (2019: 1,735,805; 2020: 1,732,053). The percentage of companies providing training was 20.7% (2019: 21.0%).

In eastern Germany, there were slightly more companies providing training than there were in the year before (2019: 61,842; 2020: 61,904), while there were slightly fewer companies overall (2019: 435,136; 2020: 431,042). The percentage of companies providing training rose to 14.4% (2019: 14.2%), but remained far below the figure for western Germany.

In 2020, the trends for individual economic sectors between 2019 and 2020 once again varied a great deal. Across Germany as a whole, the number of companies providing training increased in the construction industry, education, nursing and care services, and the public sector. The number of companies providing training declined in all other sectors.

Comparatively large falls (in relative terms) took place in the number of companies providing training in the sectors of research and development, accommodation and food service activities, and "other personal service activities".

The biggest falls in the proportion of companies providing training were recorded by the sectors of research and development, the metalworking and electrical sectors, manufacture of machinery and equipment, and car manufacturing.⁵⁰

It must be noted that not every company is authorised to provide training. According to data from the IAB Establishment Panel 2020, 50% of companies in Germany met the legal requirements for providing training on their own, and 4% in collaboration with others. In western Germany, more companies were authorised to provide training alone (51%) than in eastern Germany (43%).

The percentage of companies authorised to provide training increases with company size. While 41% of micro-enterprises with fewer than ten employees were authorised to provide training alone, the equivalent figure for large companies with more than 500 employees was 93%. The percentage of companies authorised to provide training in collaboration with others also rose with company size (3% for microenterprises, 10% for large companies).⁵²

If only those companies authorised to provide training are taken into consideration, the percentage of companies actively involved in training is much higher. According to the Institute for Employment Research (IAB), 56% of companies authorised to provide training did so in 2020. Compared with 2019 (also 56%), the proportion has remained constant for Germany as a whole. In western Germany, more authorised companies were again actively involved in training than in eastern Germany in 2020. There was a slight rise in western Germany (2019: 56%; 2020: 57%) and a decline in eastern Germany (2019: 54%; 2020: 51%).

Companies with more employees have higher rates of participation in training. In 2020, 42% of microenterprises that are authorised to provide training did so (2019: 41%), while the figure for large companies with at least 500 employees was 95% (2019: 96%). Not all companies that provide training do so continuously, and this is particularly true of micro-enterprises. Fluctuations in the need for skilled staff may be one reason why not all companies offer training every year.

Nonetheless, given the ongoing decline in the number of micro-enterprises providing training and the specific difficulties that these companies have in filling the training places they offer, there is a need for education and training policy action in this area.

⁵⁰ Detailed analyses on the development of the proportion of companies providing training and the proportion of trainees among all employees subject to social security contributions can be found in the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 7.1.

⁵¹ The attribute "authorised to provide training" is recorded here based on companies' own statements.

⁵² See the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 7.2.

2.2.3 Training and work-study programmes

Dual work-study programmes have become an established education and training format which combines the learning of academic and theoretical knowledge with the acquisition of practical occupational skills. To achieve this, the organisation and curriculum of programmes is distributed across at least two places of learning. Either regulated vocational training is combined with tertiary studies, resulting in dual programmes with integrated vocational training, or longer practical phases are incorporated into tertiary studies, resulting in dual programmes with integrated practical placements. People who complete dual programmes with integrated vocational training gain not only a degree but also a vocational qualification in a recognised training occupation. Work-study programmes now also exist for continuing vocational education and training.

Work-study programmes for initial training are offered mainly in the fields of economics, engineering, and computer science, although increasing numbers of programmes are being offered in the public service, social services, early childhood education, healthcare, and care and nursing. In recent years, the range of work-study programmes on offer has grown substantially.

An Institute for Employment Research (IAB) study on dual programmes with integrated practical placements found that they make it easier for graduates to start careers after completing their studies. The probability that work-study programme graduates will be employed in the first years after graduation is 4 percentage points higher than for university graduates, although this employment advantage is not visible later in the graduate's professional career. Graduates of work-study programmes earn on average around the same as graduates of universities of applied sciences (Fachhochschulen), i. e. less than university graduates.⁵³

The amendment of the Vocational Training Act has paved the way for major improvements to the data on work-study programmes with integrated vocational training. The Act now stipulates that, from the 2021

reporting year, the vocational training statistics of the federal and Länder statistical offices will record for every training contract whether the training is taking place as part of a work-study programme with integrated vocational training.

The Federal Ministry of Education and Research commissioned the CHE Centre for Higher Education and the f-bb Vocational Education and Training Research Institute to jointly carry out a study of dual work-study programmes, their implementation models, and development needs. The study, which took place from October 2020 to April 2022, delivers an up-to-date picture of work-study programmes in Germany. It provides an overview of the Länderspecific implementation models for work-study programme models, analyses the prerequisites for success and factors influencing the successful establishment and implementation of work-study programmes, and identifies potential development needs. The study looks at both the supply side and the demand side. Data was collected from participating higher education institutions, vocational academies, students in work-study programmes, companies, associations, and social partners.54

The background to the study is a German Bundestag resolution from October 2019 asking the Federal Government to initiate a scientific study of whether further regulation is needed, in view of the development of work-study programmes in Germany to date. The BIBB Board, working in close cooperation with the Conference of Ministers of Education and Cultural Affairs, will produce joint recommendations on an appropriate framework for work-study programmes based on the study's findings. The Bundestag was informed about the study's preliminary findings at the end of June 2021, in printed paper 19/31267.⁵⁵ The full study, with the title "Duales Studium: Umsetzungsmodelle und Entwicklungsbedarfe", was published in April 2022.

⁵³ The IAB study is available online at doku.iab.de/kurzber/2019/ kb2519.pdf.

⁵⁴ See che.de/projekt/duales-studium.

⁵⁵ See dserver.bundestag.de/btd/19/312/1931267.pdf.

2.3 New training relationships and supply and demand for training in 2021

2.3.1 Integrated Reporting on Training

Data supplied by Integrated Reporting on Training (iABE) provides a current overview of education and training activities in Germany involving young people who have completed lower secondary education. It is a reporting system that consolidates or "integrates" various official statistics to provide a complete picture of education and training activities. As well as data on dual vocational training under the Vocational Training Act (Berufsbildungsgesetz) and Crafts Code (Handwerksordnung)56, it includes data on trainees beginning other forms of vocational training outside the scope of the Vocational Training Act and Crafts Code that result in full qualifications, such as schoolbased vocational training for healthcare, education, and social services occupations and other schoolbased vocational training.⁵⁷ Integrated Reporting on Training also includes data on the transition sector, on training and education measures that enable participants to gain a higher education entrance qualification, and on tertiary studies.

Integrated Reporting on Training classifies all courses within sectors and categories, based on their main goals.⁵⁸ At the top level are four sectors: vocational training, integration into training (transition sector), acquisition of a higher education entrance qualification, and tertiary studies.⁵⁹

- 56 The data used in iABE on dual vocational training under the Vocational Training Act and Crafts Code is drawn from the vocational schools statistics and not from the BIBB survey on 30 September or the vocational training statistics on 31 December. Discrepancies with other information provided in the Report on Vocational Education and Training, for example, in Chapter 2.3.2.1, are due to the different statistics and surveys used (for more details, see the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 4.1).
- 57 Other school-based vocational training includes here the iABE categories "School-based vocational training at full-time vocational schools under the Vocational Training Act/Crafts Code" (I 02), "School-based vocational training at full-time vocational schools outside the scope of the Vocational Training Act/Crafts Code" (I 03), "School-based vocational training resulting in the acquisition of a higher education entrance qualification (awarding two qualifications)" (I 04) and "Vocational training in a training relationship governed by public law (training for the intermediate service of the civil service)" (I 06).
- 58 For more details on the iABE system of training sectors and categories, see also bibb.de/iABE and the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 4.
- 59 The iABE classification is different from that used in the "Education in

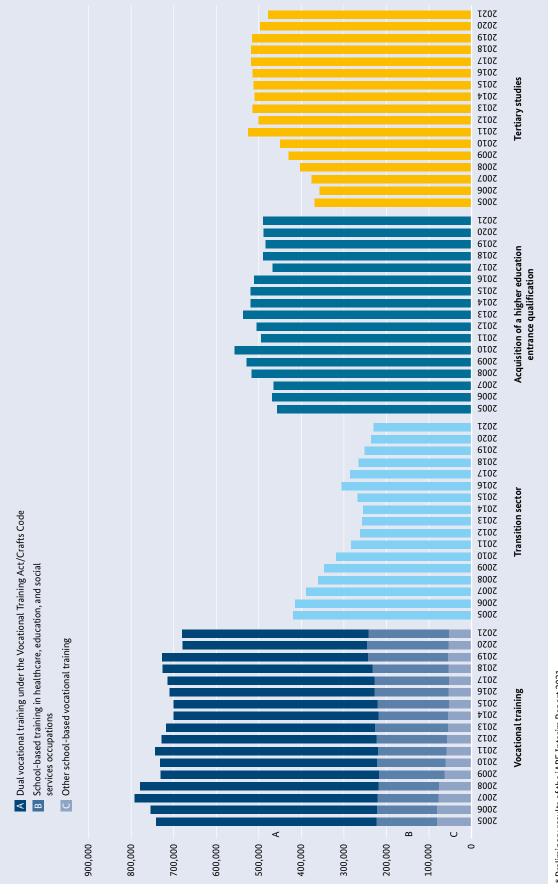
Since the beginning of the coronavirus crisis in 2020, the question of which education and training paths young people have pursued in this period has been of even greater interest. iABE data cannot be used to establish a causal relationship with the pandemic, but it does provide information on realised demand for education and training over time, so it can reveal developments and shifts in vocational training activities.

The following depiction of current developments in education and training activities in 2021 is based on preliminary data from the iABE Interim Report 2021. It is important to note that, for certain Länder, the Interim Report data for category I 05 ("School-based vocational training for healthcare, education, and social services occupations") has been supplemented by data relating to the new occupation of general nurse (Pflegefachfrau or Pflegefachmann) based on the new nursing and care training statistics. This applies both to the current 2021 reporting year and, retroactively, the 2020 reporting year. This has resulted in discrepancies with the last Report on Vocational Education and Training.⁶⁰

Germany" report published by the Authoring Group of the National Report on Education, which differentiates training in three sectors ("dual system", "school-based vocational system" and "transition sector"). The results are therefore only partly comparable.

⁶⁰ For the 2020 reporting year, the Report on Vocational Education and Training 2021 mainly drew on an estimate produced by the Federal Institute for Vocational Education and Training (BIBB) based on the 2020 iABE Interim Report, as the published Interim Report data was not entirely reliable last year. One reason for this is that the "School-based vocational training for healthcare, education, and social services occupations" category (I 05) was under-recorded: due to the introduction of the new nursing and care training statistics, certain Länder (Lower Saxony, North Rhine-Westphalia, and Saxony-Anhalt) have no longer collected data on students at health-sector schools undertaking the new vocational training programme to qualify as a general nurse (Pflegefachfrau/Pflegefachmann) since the 2020 reporting year. In addition, there has been no data on health-sector schools in Schleswig-Holstein since the 2020 reporting year. In the current iABE Interim Report 2021 of 16 March 2022, the "School-based vocational training for healthcare, education, and social services occupations" category for Lower Saxony, North Rhine-Westphalia, Saxony-Anhalt, and Schleswig-Holstein was supplemented by data (relating to the general nurse qualification) from the nursing and care training statistics (for the current reporting year and retroactively for 2020). In addition, categorisation problems for the general nurse occupation in Hesse have to be taken into account. As up-to-date data from the nursing and care training statistics for the 2021 reporting year was not available yet when the iABE was published, the Interim Report draws on data from the previous year. It must also be noted that the characteristics of nationality (non-German/German) and schooling background are not included in the nursing and care training statistics data. Analyses relating to these characteristics therefore only refer to the Länder with complete data.

Chart 3: Developments in education and training sectors/categories, 2005 to 2021*



* Preliminary results of the iABE Interim Report 2021. Sources: Federal Statistical Office, iABE 2020 (data as at 17 December 2021); iABE Interim Report 2021 (data as at 16 March 2022).

Developments in education and training activities

In 2021, the second year of the pandemic, the vocational training sector again accounted for over a third of new entrants in education and training activities, at around 677,500 people (36.3%). It thus remains the largest sector. Of the 677,500 new trainees in the vocational training sector, 437,800, or just under two-thirds, started dual vocational training under the Vocational Training Act and Crafts Code. 188,300 young people began school-based vocational training in healthcare, education, and social services occupations, while there were 51,400 new entrants in other school-based vocational training programmes. 228,100 young people began a transition sector measure, equivalent to 12.2% of all trainees. 487,800 young people began education and training to gain a higher education entrance qualification (26.1%). The tertiary studies sector recorded 475,500 new students (25.4%).

Table 6 and **Chart 3** provide information on developments in education and training sectors and in selected education and training categories.

Overall, around 21,900 (–1.2%) fewer young people were placed in education and training activities in 2021 than in the previous year. By comparison with 2019, the year before the pandemic, the number of new entrants in education and training activities fell by around 101,000 (–5.1%). This is partially due to the fact that in the period from 2019 to 2021 the number of school leavers from general schools declined by 3.0%. ^{61,62} It should also be noted that the unemployment rate for young people aged between 15 and 24 rose slightly in the same period (from 4.4% in 2019 to 4.9% in 2021). ⁶³

In the course of the coronavirus pandemic and the associated restrictions, the vocational training sector experienced a substantial drop in new trainees. In the period from 2019 to 2021, the number of people placed in vocational training leading to a full qualification fell by 47,100 (-6.5%). While dual vocational training under the Vocational Training Act and Crafts Code recorded a significant fall of around 46,000 people (-9.5%) between 2019 and 2021, the number of trainees starting in healthcare, education, and social services occupations remained constant over the same period (+0.2%). Compared to the previous year, the number of new entrants in dual vocational training increased somewhat again in 2021 (+5,500 or +1.3%). School-based vocational training programmes for healthcare, education, and social services occupations saw a slight reduction compared to the previous year (-2,800 or -1.5 %). It must be noted in this context that recent developments in the healthcare, education, and social services occupations are not depicted with complete accuracy due to the partial use of data from the previous year and the changes to data collection for trainees under the Care Professions Act (Pflegeberufegesetz).⁶⁴ The decline in the number of new trainees in dual vocational training can be partly explained by the impact of the coronavirus pandemic. Fewer training places were offered, and so young people may have moved into other forms of education

⁶¹ See Conference of Ministers of Education and Cultural Affairs (Kultusministerkonferenz) (2021): Vorausberechnung der Schülerund Absolventenzahlen 2020–2035 (Forecast of the number of school students and school leavers from 2020 to 2035) (Documentation no. 230 of November 2021), general schools.

⁶² In 2021, the number of school leavers increased by 2.3 % compared to the previous year. This increase is partly attributable to the statistical effect of the return to nine-year academic secondary schools (Gymnasien) in Lower Saxony, which resulted in a significant drop in the number of school leavers with a higher education entrance qualification in 2020. 2021 thus saw a substantial rise in the number of these school leavers.

⁶³ See Federal Employment Agency statistics (2022): Arbeitslose nach Rechtskreisen (Unemployed persons by jurisdiction) (annual figures). In the 2020 reporting year, the unemployment rate for people aged 15 to 24 was 5.5%.

For the 2020 reporting year, the Report on Vocational Education and Training 2021 mainly drew on an estimate produced by the Federal Institute for Vocational Education and Training (BIBB) based on the 2020 iABE Interim Report, as the published Interim Report data was not entirely reliable last year. One reason for this is that the "School-based vocational training for healthcare, education, and social services occupations" category (I 05) was under-recorded: due to the introduction of the new nursing and care training statistics, certain Länder (Lower Saxony, North Rhine-Westphalia, and Saxony-Anhalt) have no longer collected data on students at health-sector schools undertaking the new vocational training programme to qualify as a general nurse (Pflegefachfrau/Pflegefachmann) since the 2020 reporting year. In addition, there has been no data on health-sector schools in Schleswig-Holstein since the 2020 reporting year. In the current iABE Interim Report 2021 of 16 March 2022, the "School-based vocational training for healthcare, education, and social services occupations" category for Lower Saxony, North Rhine-Westphalia, Saxony-Anhalt, and Schleswig-Holstein was supplemented by data (relating to the general nurse qualification) from the nursing and care training statistics (for the current reporting year and retroactively for 2020). In addition, categorisation problems for the general nurse occupation in Hesse have to be taken into account. As up-to-date data from the nursing and care training statistics for the 2021 reporting year was not available yet when the iABE was published, the Interim Report draws on data from the previous year. It must also be noted that the characteristics of nationality (non-German/German) and schooling background are not included in the nursing and care training statistics data. Analyses relating to these characteristics therefore only refer to the Länder with complete data.

Table 6: Developments in numbers of new entrants in iABE sectors/categories, 2005 to 2021*

	2005	2010	2014	2015	2016	2017	2018	2019	2020	2021*	2021 compared to 2020	pared 20	2021 compared to 2019	pared 19	2021 compared to 2005	npared 05
Sector: Vocational training	739,170	729,577	698,115	698,420	707,625	712,415	723,890	724,610	676,185	677,495	1,310	0.2 %	-47,115	-6.5 %	-61,675	-8.3 %
Vocational training in the dual system under the Vocational Training Act/Crafts Code ⁷	517,342	209,900	481,136	479,545	481,423	486,428	492,669	483,714	432,261	437,761	5,500	1.3 %	-45,953	-9.5 %	-79,581	-15.4%
School-based vocational training in healthcare, education, and social services occupations	142,710	159,850	164,007	167,328	174,453	175,011	178,983	187,932	191,138	188,311	-2,827	-1.5%	379	0.2%	45,601	32.0%
Other school-based vocational training ⁸	79,118	59,827	52,970	51,546	51,752	50,976	52,245	52,966	52,782	51,428	-1,354	-2.6%	-1,538	-2.9 %	-27,690	-35.0%
Of which: vocational training in a training relationship governed by public law (training for the intermediate service of the civil service	5,955	7,314	9,345	10,050	11,245	12,390	15,405	16,765	17,855	17,855	1	1	1,090	6.5 %	11,900	199.8%
Sector: Transition sector	417,649	316,494	252,670	266,190	302,880	283,140	263,930	249,980	234,620	228,140	-6,480	-2.8 %	-21,840	-8.7 %	-189,509	-45.4 %
Sector: Acquisition of a higher education entrance qualification	454,423	554,704	517,200	516,679	508,968	465,230	487,695	482,154	485,884	487,783	1,899	0.4 %	5,629	1.2 %	33,360	7.3%
Sector: Tertiary studies ⁶	366,242	447,890	508,135	509,821	512,646	516,036	516,192	513,082	494,094	475,494	-18,600	-3.8 %	-37,588	-7.3 %	109,252	29.8 %
Education and training activities (total) ^{1, 2, 3}	1,977,480	2,048,665	1,976,120	1,976,120 1,991,110	2,032,120	1,976,820	1,991,710	1,969,820	1,890,760	1,868,910	-21,850	-1.2 %	-100,910	-5.1%	-108,570	-5.5 %

* Preliminary results of the iABE Interim Report 2021.

Please note: due to a retroactive revision of the data for 2020 in the "School-based vocational training for healthcare, education, and social services occupations" category, there are discrepancies with the information provided in the or data protection reasons, the data (absolute figures) has been rounded in some cases. The total value may therefore differ from the total of the individual figures. Report on Vocational Education and Training 2021 (for further details, see footnote 60)

¹ For Baden-Württemberg, Bremen, Lower Saxony, North Rhine-Westphalia, Rhineland-Palatinate, and Saarland: partially based on data from the previous year, estimates, or no data available. In Bremen, this only concerns health-sector schools. In North Rhine-Westphalia and Rhineland-Palatinate, this concerns areas affected by flooding.

 $^2\,\mbox{For Bremen}$ and Schleswig-Holstein: only partially comparable with the previous year due to categorisation changes.

For Bremen: not including data on private vocational schools.

Health-sector schools: no data available in Schleswig-Holstein.

No data available on trainees training to become a general nurse in

North Rhine-Westphalia, Lower Saxony, and Saxony-Anhalt.

In North Rhine-Westphalia, Lower Saxony, Saxony-Anhalt, and Schleswig-Holstein, data from the 2020 nursing and care training statistics has additionally been incorporated for health-sector schools. Data for Lower Saxony has been adjusted to avoid double counting of existing trainees training to become a general nurse at full-time vocational schools. Full-time vocational schools: no data available on trainees training to become a general nurse in Saxony-Anhalt.

 $^{\rm S}$ Previous year's data for 2021. $^{\rm G}$ Including students in their first year at vocational academies

(previous year's data for 2021)

 $^{\rm 7}$ Including comparable forms of vocational training (section 3 (2) no. 3 of the Vocational Training Act).

⁸ Other school-based vocational training includes here the iABE categories "School-based vocational training at full-time vocational schools under the Vocational Training Act/Crafts Code" (102), "School-based vocational training at full-time vocational schools outside the scope of the Vocational Training Act/Crafts Code, subject to Land law." (103), "School-based vocational training resulting in the acquisition of a higher education entrance qualification (awarding two qualifications)" (104) and "Vocational training relationship governed by public law (training for the intermediate service of the civil service)" (106).

Sources: Federal Statistical Office, iABE 2020 (data as at 17 December 2021); iABE Interim Report 2021 (data as at 16 March 2022).

Table 7: New entrants in iABE sectors/categories by selected characteristics

	202	21*			2020		
	Proportion female ²	Proportion not German	No secondary general school certificate	With secondary general school certificate	With intermediate school-leaving certificate ³	With higher education entrance qualification	Other
				(in %)			
New trainees (total) ¹	49.4	18	4	13	45	37	2
Vocational training ¹	48.2	14	2	21	52	21	3
► Dual vocational training under the Vocational Training Act/Crafts Code	36.8	12.1	3.9	23.3	46.7	23.4	2.7
School-based vocational training in healthcare, education, and social services occupations¹	75.8	17	1	18	56	25	1
► Other forms of school- based vocational training (incl. training for the civil service)	44.6	9.9	0.4	6.1	85.5	7.7	0.3
Integration into vocational training (transition sector)	39.0	29.8	26.4	45.3	21.1	1.8	5.5
Acquisition of a higher education entrance qualification (upper secondary level)	53.1	7.4	0.1	1.4	97.7	0.2	0.5
Tertiary studies	52.3	24.3	-	-	-	100	-

^{*} Preliminary results of the iABE Interim Report 2021. Differentiated data on schooling background is not yet available for 2021.

and training. For example, there was a rise in the number of new entrants in the acquisition of a higher education entrance qualification sector between 2019 and 2021 (+1.2%). At least in 2020, the first year of the pandemic, there was also an increase in new trainees in healthcare, education, and social services occupations, as well as in German nationals starting to study at higher education institutions. In the second year of the pandemic, however, numbers fell again in these areas.

As in recent years (since 2016), the number of people entering the transition sector fell once more. Compared with the previous year, the number of those placed in measures in this sector fell by 6,500 in 2021 (–2.8%). By comparison with 2019, the sector recorded a decline of 21,800 people (–8.7%). In addition to demographic effects, another factor in this is that fewer young people registered for careers guidance or

placement in training during the pandemic, in part because the usual access routes were restricted. ⁶⁵ This probably also led to fewer young people being placed in transition sector measures. In addition, there are indications that more young people remained in the school system.

The acquisition of a higher education entrance qualification sector recorded a further increase in new entrants in 2021 compared to the previous year (+1,900 or +0.4%). By comparison with 2019, this is the only sector to see an increase in the number of new entrants, of around 5,600 (+1.2%). The trend towards higher-level school-leaving qualifications thus continued.

¹The percentages for nationality and for schooling background exclude Lower Saxony, North Rhine-Westphalia, Saxony-Anhalt, and Schleswig-Holstein due to the lack of data for the "School-based vocational training for healthcare, education, and social services occupations" category (see footnote 60). The figures have been rounded.

² In view of the analytical capabilities of the Länder, people who state their gender as "other" or "not stated" are assigned to the male or female gender or the categories "male" and "female" randomly (without a proportional quota, with an expected value of 0.5).

³ Including the school-based part of an entrance qualification for universities of applied sciences (Fachhochschulreife).

Sources: Federal Statistical Office, iABE 2020 (data as at 17 December 2021); iABE Interim Report 2021 (data as at 16 March 2022).

⁶⁵ See, for example, Federal Employment Agency (Bundesagentur für Arbeit) (2021): Berichte: Blickpunkt Arbeitsmarkt – Situation am Ausbildungsmarkt (Reports: Labour Market Overview – Training Market Situation) (November 2021).

The tertiary studies sector recorded another fall in the number of new students in 2021 compared to the year before (-18,600 or -3.8%). The first year of the pandemic had already seen a significant reduction in new students in the higher education sector, but different trends were visible for German and non-German young people. The number of foreign nationals who were new students in 2020 fell by 19.9% in comparison to 2019. One reason for this is that the pandemic led to a sharp fall in the number of nonnationals who acquired their university entrance qualifications outside Germany and began studying in Germany, from around 111,000 in 2019 to 86,000 in 2020, according to the Federal Statistical Office. This represents a fall of around 23%. In the case of German nationals, there was a slight increase of 1.6% in the number of new students in 2020, the first year of the pandemic, compared to the previous year. According to the Federal Statistical Office, the proportion of young people transitioning from school to tertiary studies also reached a record level of 48% in 2020, compared to around 43 % in 2019.66 The second year of the pandemic has seen a renewed decline in the number of German nationals who are new students in the higher education sector (-33,000 or -8.5% in 2021 compared to 2020). According to iABE Interim Report data, the number of new students who are foreign nationals increased again in 2021 by comparison with 2020 (+15,000 or +14.9%). Data for 2021 is not yet available for non-nationals who acquired their university entrance qualifications outside Germany.

From a more long-term perspective, relative to the base year of 2005, the following trends can be observed: in the vocational training sector, the number of new trainees has fallen by 61,700 (-8.3%). In this sector, the number of people beginning dual vocational training under the Vocational Training Act and Crafts Code has fallen steeply compared with the 2005 figure (-79,600 or -15.4%). Numbers of new trainees in healthcare, education, and social services occupations have increased markedly compared with the 2005 figure (+45,600 or +32.0%). This development must be seen in the context of demographic change and a growing need for skilled staff in the nursing, care, and

early childhood education sectors. The number of new trainees in other forms of school-based vocational training has fallen sharply compared with 2005 (-27,700 or -35.0%). The acquisition of a higher education entrance qualification sector has recorded an increase of 33,400 (+7.3%) compared with the 2005 figure. Over the same period, the number of new students in the tertiary studies sector rose considerably (+109,300 or +29.8%). These outcomes reflect a general trend towards higher-level school-leaving qualifications and young people's increasing tendency to pursue tertiary studies.

New entrants in iABE sectors, differentiated by selected characteristics

The gender balance in the vocational training sector was relatively even in 2021 (48.2% women). A closer examination of the sector reveals, however, that the percentage of women was well below average (36.8%) in dual vocational training under the Vocational Training Act and Crafts Code, and well above average in school-based training for healthcare, education, and social services occupations (75.8%). There were also somewhat more young women in the acquisition of a higher education entrance qualification (53.1%) and tertiary studies (52.3%) sectors, while men made up the majority in the transition sector (39.0% women).

The various sectors and categories differ significantly in terms of the proportions of new entrants who were foreign nationals. ⁶⁷ In 2021, the transition sector had the highest proportion of new entrants who were not German nationals, at 29.8 %. This figure was much lower in the vocational training sector (14%) and the acquisition of a higher education entrance qualification sector (7.4%). The proportion of non-German nationals in dual vocational training under the Vocational Training Act and Crafts Code (12.1%) was lower than in school-based vocational training in healthcare, education, and social services occupations (17%). ⁶⁸ In the tertiary studies sector, 24.3% of new entrants were non-German nationals, marking a return to the pre-pandemic level.

⁶⁶ See Federal Statistical Office 2021: Press release no. 071 (15 December 2021): Überdurchschnittlich viele Studienberechtigte aus dem Coronajahr 2020 starten direkt ins Studium (Above-average number of people attaining a higher education entrance qualification in 2020 began their studies immediately in the corona year). Wiesbaden.

⁶⁷ Excluding Lower Saxony, North Rhine-Westphalia, Saxony-Anhalt, and Schleswig-Holstein due to the lack of data for the "School-based vocational training for healthcare, education, and social services occupations" category (for more detail, see footnote 60).

⁶⁸ The comparatively low percentage of foreign nationals in other forms of school-based vocational training (9.9%) is due to the consolidation of this figure with that of trainees in training for the civil service, which is open only to German citizens.

Table 8: Newly concluded training contracts, supply and demand

								Trend co	mpared witl	h the prev	vious year	
	New training	Unfilled training	Unplaced applicants	Supply	Demand	Supply and demand	Contr	acts	Supp	oly	Dema	and
	contracts	places				ratio (ANR)	absolute	in%	absolute	in%	absolute	in%
Nationw	ride											
2010	559,960	19,898	12,033	579,858	571,993	101.4	-4,347	-0.8	-2,215	-0.4	-7,824	-1.3
2011	569,380	30,487	11,366	599,867	580,746	103.3	9,420	1.7	20,009	3.5	8,753	1.5
2012	551,258	34,075	15,673	585,333	566,931	103.2	-18,122	-3.2	-14,534	-2.4	-13,815	-2.4
2013	529,542	34,720	21,087	564,262	550,629	102.5	-21,716	-3.9	-21,071	-3.6	-16,302	-2.9
2014	523,201	38,449	20,932	561,650	544,133	103.2	-6,341	-1.2	-2,612	-0.5	-6,496	-1.2
2015	522,161	41,678	20,782	563,839	542,943	103.8	-1,040	-0.2	2,189	0.4	-1,190	-0.2
2016	520,272	43,561	20,550	563,833	540,822	104.3	-1,889	-0.4	-6	0.0	-2,121	-0.4
2017	523,290	48,984	23,712	572,274	547,002	104.6	3,018	0.6	8,441	1.5	6,180	1.1
2018	531,413	57,656	24,540	589,069	555,953	106.0	8,123	1.6	16,795	2.9	8,951	1.6
2019	525,038	53,137	24,525	578,175	549,563	105.2	-6,375	-1.2	-10,894	-1.8	-6,390	-1.1
2020	467,485	59,948	29,349	527,433	496,834	106.2	-57,553	-11.0	-50,742	-8.8	-52,729	-9.6
2021	473,063	63,176	24,614	536,239	497,677	107.7	5,578	1.2	8,806	1.7	843	0.2
Western	Germany											
2010	468,297	16,058	8,357	484,355	476,654	101.6	2,988	0.6	4,122	0.9	190	0.0
2011	484,885	25,114	8,319	509,999	493,204	103.4	16,588	3.5	25,644	5.3	16,550	3.5
2012	472,354	27,704	10,605	500,058	482,959	103.5	-12,531	-2.6	-9,941	-1.9	-10,245	-2.1
2013	455,298	28,262	16,342	483,560	471,640	102.5	-17,056	-3.6	-16,498	-3.3	-11,319	-2.3
2014	448,908	31,490	16,623	480,398	465,531	103.2	-6,390	-1.4	-3,162	-0.7	-6,109	-1.3
2015	448,026	34,054	16,398	482,080	464,424	103.8	-882	-0.2	1,682	0.4	-1,107	-0.2
2016	446,284	35,594	16,245	481,878	462,529	104.2	-1,742	-0.4	-202	0.0	-1,895	-0.4
2017	448,664	40,713	18,365	489,377	467,029	104.8	2,380	0.5	7,499	1.6	4,500	1.0
2018	455,448	47,985	17,901	503,433	473,349	106.4	6,784	1.5	14,056	2.9	6,320	1.4
2019	449,977	44,607	17,984	494,584	467,961	105.7	-5,471	-1.2	-8,849	-1.8	-5,388	-1.1
2020	398,770	49,191	22,088	447,961	420,858	106.4	-51,207	-11.4	-46,623	-9.4	-47,103	-10.1
2021	401,313	52,204	17,939	453,517	419,252	108.2	2,543	0.6	5,556	1.2	-1,606	-0.4
Eastern	Germany											
2010	91,663	3,688	3,675	95,351	95,338	100.0	-7,335	-7.4	-6,359	-6.3	-8,012	-7.8
2011	84,495	5,232	3,043	89,727	87,538	102.5	-7,168	-7.8	-5,624	-5.9	-7,800	-8.2
2012	78,904	6,249	5,066	85,153	83,970	101.4	-5,591	-6.6	-4,574	-5.1	-3,568	-4.1
2013	74,244	6,344	4,533	80,588	78,777	102.3	-4,660	-5.9	-4,565	-5.4	-5,193	-6.2
2014	74,293	6,840	4,099	81,133	78,392	103.5	49	0.1	545	0.7	-385	-0.5
2015	74,135	7,555	4,354	81,690	78,489	104.1	-158	-0.2	557	0.7	97	0.1
2016	73,988	7,952	4,259	81,940	78,247	104.7	-147	-0.2	250	0.3	-242	-0.3
2017	74,626	8,229	5,328	82,855	79,954	103.6	638	0.9	915	1.1	1,707	2.2
2018	75,965	9,660	6,619	85,625	82,584	103.7	1,339	1.8	2,770	3.3	2,630	3.3
2019	75,061	8,516	6,462	83,577	81,523	102.5	-904	-1.2	-2,048	-2.4	-1,061	-1.3
2020	68,715	10,745	7,065	79,460	75,780	104.9	-6,346	-8.5	-4,117	-4.9	-5,743	-7.0
2021	71,750	10,956	6,515	82,706	78,265	105.7	3,035	4.4	3,246	4.1	2,485	3.3

Discrepancies between the totals for "western Germany" and "eastern Germany" and the nationwide figures may be due to data that cannot be classified.

1) For a longer time series from 1992, please see the Report on Vocational Education and Training 2019.

Due to revisions, there are discrepancies with earlier presentations of the figures for 2019.

Sources: BIBB, survey on 30 September; Federal Employment Agency statistics, special analysis made in preparation for the Report on Vocational Education and Training (retroactive adjustment of the time series).

There were major differences in the educational backgrounds of young people starting training in 2020⁶⁹, especially within the vocational training sector. Young people do not have to have a formal school-leaving qualification to start dual vocational training, but this is not always the case for schoolbased vocational training. Accordingly, the percentages of new trainees in dual vocational training who did not have a secondary general school certificate (3.9%) and of those with a secondary general school certificate (23.3%) were higher than the figures for school-based vocational training. Among the new trainees in other forms of school-based vocational training, which are mainly training programmes for what are known as assistant occupations, 85.5% had an intermediate school-leaving certificate, while just 6.1% began training with a secondary general school certificate. Around 25% of new trainees in schoolbased vocational training in healthcare, education, and social services occupations even had a general or subject-restricted higher education entrance qualification.70

2.3.2 Training in occupations under the Vocational Training Act and Crafts Code

Following the overview of vocational training activities and developments provided by Integrated Reporting on Training, the next section will focus on dual vocational training under the Vocational Training Act (Berufsbildungsgesetz) and the Crafts Code (Handwerksordnung). The information provided about supply and demand for training is based on findings from the survey of newly concluded training contracts conducted by the Federal Institute for Vocational Education and Training (BIBB) on 30 September and Federal Employment Agency (BA) training market statistics. Both of these sources offer key information about the training market and are used when taking stock of supply and demand (section 86 of the Vocational Training Act).

2.3.2.1 Newly concluded training contracts in 2021

The training market underwent a significant contraction in 2020 due to the coronavirus pandemic and the associated restrictions. The number of newly concluded training contracts fell by 57,553 (–11.0%) to 467,485.⁷¹

In 2021, the situation in the training market has relaxed only slightly, and it is a long way from returning to pre-pandemic levels. Across Germany as a whole, 473,063 new training contracts were concluded, an increase of 5,578 contracts (+1.2%) compared to the previous year. However, the number of newly concluded contracts remained well below (-51,975 or -9.9%) the figure in 2019, the year before the pandemic.

The number of new contracts for company-based training rose by 3,956 (+0.9%) to 456,551, which is 54,120 contracts fewer (-10.6%) than in 2019.⁷²

Newly concluded contracts for non-company training saw an increase of 1,622 contracts (+10.9%) in 2021 (2020: 14,890; 2021: 16,512). The figure also rose (+2,145 or +14.9%) by comparison with 2019 (14,367).

Developments in the number of newly concluded training contracts and other key training market data are shown in **Table 8**.

The supply and demand ratio (ANR)

The supply and demand ratio (ANR) is calculated by contrasting the supply of and demand for training⁷³ in the training market. It indicates how many training places are available, in mathematical terms, for every 100 people seeking training.

⁶⁹ Differentiated data on schooling background is not yet available for 2021.

⁷⁰ For details of the schooling background of new entrants in sectors and categories relating to the transition sector, see Chapter 2.1.3.

⁷¹ It should be noted that the contraction of the training market in 2020 is not solely attributable to the COVID-19 crisis. Even before the pandemic, falls in supply and demand and in newly concluded training contracts were expected, particularly as a result of falling school leaver numbers. For more detailed information, see the Report on Vocational Education and Training 2021, Special chapter: The training market during the coronavirus pandemic, and the Report on Vocational Education and Training 2021, Chapter 2.3.2.

⁷² For more details, see Chapter 2.3.2.2.

⁷³ For information about developments in supply and demand, see Chapter 2.1.2 and 2.2.1.



Chart 4: ANR, expanded ANR, and expanded ANR based on company-based training places

Sources: BIBB, survey on 30 September; Federal Employment Agency statistics, special analysis made in preparation for the Report on Vocational Education and Training.

In 2021, the supply and demand ratio was 107.7 (2019: 105.2; 2020: 106.2). Expanded ANR⁷⁴ was 99.1 (in both 2020 and 2019: 96.6). Expanded ANR based on company-based training places was 96.1 (2019: 94.2; 2020: 93.9). **Chart 4** shows information on the development of ANR nationally from 2009 to 2021.

In western Germany, the supply and demand ratio was 108.2 (2019: 105.7; 2020: 106.4). Expanded ANR was 99.2 (2019: 96.7; 2020: 96.6). Expanded ANR based on company-based training places was 96.6 (2019: 94.7; 2020: 94.3). Eastern Germany recorded a supply and demand ratio of 105.7 (2019: 102.5; 2020: 104.9) in 2021. Expanded ANR (2019: 95.9; 2020: 97.2; 2021: 99.1) and expanded ANR based on company-based training places (2019: 90.9; 2020: 91.9; 2021: 93.7) also rose slightly.⁷⁵

Going beyond the distinction made between eastern and western Germany, significant regional differences exist. ANR figures in the Länder, for example, range from 87.2 (Berlin) to 117.5 (Bavaria); expanded ANR was highest in Bavaria, at 111.3. However, Thuringia (110.0), Mecklenburg-Western Pomerania (108.5), Saxony-Anhalt (103.7), Baden-Württemberg (103.4), Saarland (102.9), and Saxony (101.2) all reported figures of 100 and above as well. Berlin (82.8) and Hamburg (89.0) recorded the lowest figures.⁷⁶

The placement rate of young people interested in training (EQI)

The placement rate of young people interested in training (EQI) calculates the proportion of young people registered with institutions as being interested in training who were recruited into dual vocational training in a given reporting year. The figure is calculated by comparing the number of newly concluded training contracts on 30 September (2021: 473,063) with the number of all young people

⁷⁴ Demand based on the expanded definition is calculated on the basis of the number of newly concluded training contracts recorded in the BIBB survey on 30 September, plus the number of unplaced applicants registered with the Federal Employment Agency and the number of applicants who had an alternative on 30 September but still wanted to be placed in training.

⁷⁵ For longer time series for supply and demand ratios in eastern and western Germany, see the Report on Vocational Education and Training 2019, Chapter 2.2.1.

⁷⁶ Findings relating to the 2021 training market differentiated by Länder, employment agency districts, and occupations can be found on the BIBB website. The website also features a large number of tables and interactive regional maps that visualise key training market data and indicators. See bibb.de/naa309-2021.

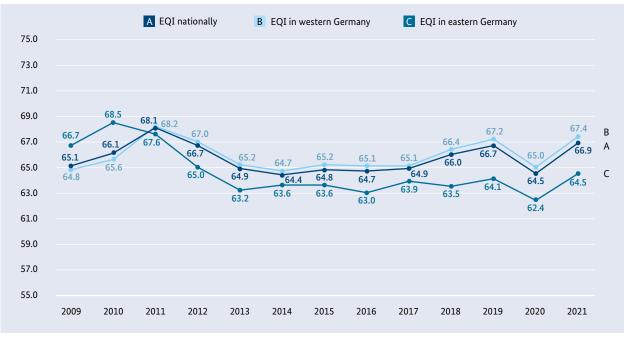


Chart 5: The placement rate of young people interested in training (EQI)

Sources: BIBB, survey on 30 September; Federal Employment Agency statistics, special analysis made in preparation for the Report on Vocational Education and Training.

registered with institutions as being interested in training (2021: 707,059).⁷⁷ This figure is reached by adding the number of newly concluded training contracts (473,063) and the number of applicants registered with the employment agencies and jobcentres (433,543), then subtracting the number of registered applicants who were placed in training (199,547), because otherwise some applicants would be counted twice.

The national EQI figure was 66.9, higher than in the past two years (2020: 64.5; 2019: 66.7). **Chart 5** shows the development of EQI for Germany as a whole, and for western and eastern Germany.

The findings relating to the supply and demand ratio and the placement rate of young people interested in training indicate that the market situation has improved in 2021 from the perspective of young people seeking a training place. That said, this is also partly attributable to the fact that demand and the number of people interested in training is much lower than in previous years. This must be taken very seriously with a view to securing the future supply of skilled labour.

EQI also varied considerably in the different Länder. Bavaria (75.4), Thuringia (74.3), Hamburg (72.5), Mecklenburg-Western Pomerania (72.0), Saxony-Anhalt (71.5), and Baden-Württemberg (71.1) recorded exceptionally high figures, above 70%, while EQI was comparatively low (under 60%) in Berlin (51.8).

⁷⁷ The placement rate refers to all young people who expressed an interest in training during the reporting year. By the reference date of 30 September, however, some applicants who were registered as looking for vocational training places during the year may no longer wish to be placed in training (e.g. because they changed their minds during the reporting year and decided to start tertiary studies or school-based training), or their subsequent destination may be unknown. This means that some applicants may have been counted twice because the number of people whose destination is unknown is likely to include applicants who have actually started training. In addition, there are also applicants who apply while already undergoing training (see Chapter 2.4.2).

⁷⁸ Demand: 2009: 579,817; 2019: 549,563; 2020: 496,834; 2021: 497,677; demand (expanded definition): 2009: 652,947; 2019: 598,759; 2020: 545,722; 2021: 540,881; young people interested in training: 2009: 867,000; 2019: 786,866; 2020: 724,310; 2021: 707,059.

Table 9: Newly concluded training contracts in 2021 by Land and training sector

					Newly	concluded	training c	ontracts				
		T-4-1					Of wh	nich in the s	ector:		,	
		Total		Trac	de and indu	stry	S	killed trade	es	Profe	essional ser	vices
	Number	Cha from		Number	Cha from	nge 2020	Number	Cha from	nge 2020	Number	Cha from	
		absolute	%		absolute	%		absolute	%		absolute	%
Baden- Württemberg	65,974	-504	-0.8	37,128	-811	-2.1	18,636	-95	-0.5	6,372	458	7.7
Bavaria	81,897	-1,855	-2.2	44,090	-2,298	-5.0	24,484	-128	-0.5	8,908	527	6.3
Berlin	14,426	711	5.2	8,013	507	6.8	3,350	5	0.1	2,013	175	9.5
Brandenburg	10,335	431	4.4	5,599	111	2.0	3,084	288	10.3	648	53	8.9
Bremen	5,315	137	2.6	3,288	36	1.1	1,203	49	4.2	517	61	13.4
Hamburg	11,560	-100	-0.9	7,535	-103	-1.3	2,374	-110	-4.4	1,266	126	11.1
Hesse	33,177	-107	-0.3	18,512	-722	-3.8	9,495	394	4.3	3,201	149	4.9
Mecklenburg- Western Pomerania	8,068	513	6.8	4,450	282	6.8	2,235	195	9.6	482	13	2.8
Lower Saxony	48,646	1,859	4.0	24,083	-146	-0.6	15,655	1,279	8.9	4,875	579	13.5
North Rhine- Westphalia	107,266	3,756	3.6	59,524	555	0.9	29,489	1,658	6.0	12,153	1,224	11.2
Rhineland- Palatinate	23,389	-296	-1.2	12,052	-759	-5.9	7,477	175	2.4	2,412	380	18.7
Saarland	5,989	-20	-0.3	3,387	-30	-0.9	1,728	26	1.5	570	-2	-0.3
Saxony	18,876	627	3.4	10,961	299	2.8	5,427	182	3.5	1,008	126	14.3
Saxony-Anhalt	10,290	518	5.3	6,143	304	5.2	2,824	245	9.5	436	40	10.1
Schleswig- Holstein	18,100	-327	-1.8	8,892	-262	-2.9	6,000	-188	-3.0	1,800	59	3.4
Thuringia	9,755	235	2.5	5,724	211	3.8	2,641	-69	-2.5	521	75	16.8
Western Germany	401,313	2,543	0.6	218,491	-4,540	-2.0	116,541	3,060	2.7	42,074	3,561	9.2
Eastern Germany	71,750	3,035	4.4	40,890	1,714	4.4	19,561	846	4.5	5,108	482	10.4
Nationwide	473,063	5,578	1.2	259,381	-2,826	-1.1	136,102	3,906	3.0	47,182	4,043	9.4

					Newly	concluded	training c	ontracts				
					C	Of which in	the secto	r:				
	Р	ublic servic	e		Agriculture	1	Н	ousekeepii	ng		Shipping	
	Number	Cha from	U	Number	Cha from	_	Number	£	nge 2020	Number	Cha from	
		absolute	%		absolute	%		absolute	%		absolute	%
Baden- Württemberg	1,982	-97	-4.7	1,585	75	5.0	271	-34	-11.1	0	0	0.0
Bavaria	1,968	-19	-1.0	2,227	49	2.2	220	14	6.8	0	0	0.0
Berlin	744	-20	-2.6	264	27	11.4	42	17	68.0	0	0	0.0
Brandenburg	468	-38	-7.5	485	17	3.6	51	0	0.0	0	0	0.0
Bremen	201	-3	-1.5	55	-18	-24.7	47	15	46.9	4	-3	-42.9
Hamburg	155	5	3.3	161	-18	-10.1	24	3	14.3	45	-3	-6.3
Hesse	1,085	-59	-5.2	772	31	4.2	112	100	833.3	0	0	0.0
Mecklenburg- Western Pomerania	355	-3	-0.8	491	23	4.9	46	0	0.0	9	3	50.0
Lower Saxony	1,509	-36	-2.3	2,248	209	10.3	240	-28	-10.4	36	2	5.9
North Rhine- Westphalia	3,068	-34	-1.1	2,712	343	14.5	320	10	3.2	0	0	0.0
Rhineland- Palatinate	666	-48	-6.7	670	-30	-4.3	112	-14	-11.1	0	0	0.0
Saarland	130	-16	-11.0	129	-11	-7.9	45	13	40.6	0	0	0.0
Saxony	587	-47	-7.4	802	68	9.3	91	-1	-1.1	0	0	0.0
Saxony-Anhalt	397	-49	-11.0	438	7	1.6	52	-29	-35.8	0	0	0.0
Schleswig- Holstein	519	-26	-4.8	771	-16	-2.0	103	103		15	3	25.0
Thuringia	351	29	9.0	438	3	0.7	80	-14	-14.9	0	0	0.0
Western Germany	11,283	-333	-2.9	11,330	614	5.7	1,494	182	13.9	100	-1	-1.0
Eastern Germany	2,902	-128	-4.2	2,918	145	5.2	362	-27	-6.9	9	3	50.0
Nationwide	14,185	-461	-3.1	14,248	759	5.6	1,856	155	9.1	109	2	1.9

Table 10: Newly concluded training contracts by financing form

v	Newly concluded	Natio	nwide	Western	Germany	Eastern	Germany
Year	training contracts	absolute	relative	absolute	relative	absolute	relative
	Total	564,307	100.0%	465,309	100.0%	98,998	100.0%
2009	Company-based	518,506	91.9%	442,439	95.1%	76,067	76.8%
	Non-company	45,801	8.1%	22,870	4.9 %	22,931	23.2%
	Total	525,038	100.0%	449,977	100.0%	75,061	100.0%
2019	Company-based	510,671	97.3 %	439,941	97.8%	70,730	94.2%
	Non-company	14,367	2.7 %	10,036	2.2 %	4,331	5.8%
	Total	467,485	100.0%	398,770	100.0%	68,715	100.0%
2020	Company-based	452,595	96.8 %	388,240	97.4%	64,355	93.7%
	Non-company	14,890	3.2 %	10,530	2.6%	4,360	6.3 %
	Total	473,063	100.0%	401,313	100.0%	71,750	100.0%
2021	Company-based	456,551	96.5 %	389,292	97.0%	67,259	93.7%
	Non-company	16,512	3.5 %	12,021	3.0 %	4,491	6.3 %

The time series for 2010 to 2018 can be found in the Report on Vocational Education and Training 2020. Source: BIBB, survey on 30 September.

2.3.2.2 Newly concluded training contracts differentiated by structural characteristics

Developments in training sectors⁷⁹

In the **trade and industry** sector, which is by far the biggest training sector, with 54.8% (2019: 58.0%; 2020: 56.1%) of all newly concluded training contracts, 259,381 contracts were concluded nationwide in 2021. That is 2,826 contracts fewer (-1.1%) than in the previous year. Compared to 2019, it represents a fall of 45,211 contracts (-14.8%).

The **skilled trades** sector was once again the secondlargest sector in 2021, with 28.8% of all newly concluded training contracts (2019: 27.2%; 2020: 28.3%). A total of 136,102 new training contracts were registered in this sector, 3,906 (+3.0%) more than in 2020. Compared to 2019, this represents a decline of 6,773 contracts (-4.7%).

The **professional services** sector recorded an increase of 4,043 (+9.4%) to 47,182 newly concluded training contracts. The proportion of all new training contracts classified as falling in the professional services sector rose nationally to 10.0% (2019: 9.0%; 2020: 9.2%). By comparison with 2019, 82 more contracts (+0.2%) were concluded.

The **agriculture** sector, with 14,248 newly concluded training contracts, recorded an increase (+759 or +5.6%) compared to 2020. The number of new contracts also rose by comparison with 2019 (+880 or +6.6%).

The **public service** saw a decline, with 14,185 newly concluded training contracts. A total of 461 fewer contracts (-3.1%) were concluded than in 2020 and 902 fewer contracts (-6.0%) than in 2019.

In the **housekeeping** sector, the number of newly concluded training contracts rose by 155 (+9.1%) to 1,856. By comparison with 2019, the number fell by 43 (-2.3%).

⁷⁹ The BIBB survey on 30 September classifies newly concluded training contracts by training sector in terms of responsibility, i.e. based on the entity regulating that training occupation. The following should therefore be noted: "What is decisive in the classification of training contracts by sector is usually the training occupation and not the organisation providing training. The contracts of trainees who train in commercial occupations within the public service, for example, may be classified as training in trade and industry or in the skilled trades (depending on the regulating entity). [...] The classification therefore refers to "training sectors" in the sense of areas of responsibility, not to "fields of training", because the training actually provided in individual fields does not necessarily correspond with the results by training sector. For example, in some Länder the chambers of industry and commerce are also responsible for the field of housekeeping and for training in some public service occupations, so a clear division by field of training is not always possible" (see the Data Report accompanying the Report on Vocational Education and Training 2020, Chapter A 1.2).

Table 11: Newly concluded training contracts by financing form and Land (Part 1)

			Newly	concluded training co	ntracts	
				Of w	hich	
Land	Year	Total -	Compar	ıy-based	Non-c	ompany
		Number	Number	Percentage	Number	Percentage
	2009	74,810	72,156	96.5	2,654	3.5
Baden-Württemberg	2019	74,079	72,668	98.1	1,411	1.9
	2020	66,478	65,031	97.8	1,447	2.2
	2021	65,974	64,249	97.4	1,725	2.6
	2009	93,564	90,097	96.3	3,467	3.7
Bavaria	2019	92,707	91,423	98.6	1,284	1.4
	2020	83,752	82,285	98.2	1,467	1.8
	2021	81,897	79,923	97.6	1,974	2.4
	2009	19,485	15,425	79.2	4,060	20.8
Berlin	2019	15,981	15,253	95.4	728	4.6
	2020	13,715	12,832	93.6	883	6.4
	2021	14,426	13,247	91.8	1,179	8.2
	2009	15,065	11,233	74.6	3,832	25.4
		·			·	
Brandenburg	2019	10,533	9,979	94.7	554	5.3
Ū	2020	9,904	9,339	94.3	565	5.7
	2021	10,335	9,769	94.5	566	5.5
	2009	6,133	5,667	92.4	466	7.6
		·				
Bremen	2019	5,777	5,489	95.0	288	5.0
	2020	5,178	4,788	92.5	390	7.5
	2021	5,315	4,953	93.2	362	6.8
	2009	13,496	12,760	94.5	736	5.5
		· · · · · · · · · · · · · · · · · · ·				
Hamburg	2019	13,480	13,046	96.8	434	3.2
•	2020	11,660	11,220	96.2	440	3.8
	2021	11,560	11,108	96.1	452	3.9
	2009	39,453	36,183	91.7	3,270	8.3
		·			-	
Hesse	2019	38,335	37,029	96.6	1,306	3.4
	2020	33,284	31,942	96.0	1,342	4.0
	2021	33,177	31,638	95.4	1,539	4.6
	2009	11,825	8,918	75.4	2,907	24.6
		,	,- · ·		<u> </u>	
Mecklenburg-	2019	8,015	7,594	94.7	421	5.3
Western Pomerania	2020	7,555	7,136	94.5	419	5.5
	2021	8,068	7,699	95.4	369	4.6

Table 11: Newly concluded training contracts by financing form and Land (Part 2)

			Newly	concluded training co	ntracts	
				Ofw	hich	
Land	Year	Total	Compar	ny-based	Non-c	ompany
		Number	Number	Percentage	Number	Percentage
	2009	57,395	55,085	96.0	2,310	4.0
Lower Saxony	2019	54,192	53,010	97.8	1,182	2.2
	2020	46,787	45,571	97.4	1,216	2.6
	2021	48,646	47,475	97.6	1,171	2.4
	2009	121,504	114,587	94.3	6,917	5.7
North Rhine-Westphalia	2019	118,561	115,876	97.7	2,685	2.3
	2020	103,510	100,716	97.3	2,794	2.7
	2021	107,266	104,003	97.0	3,263	3.0
	2009	28,851	27,348	94.8	1,503	5.2
Rhineland-Palatinate	2019	25,796	25,129	97.4	667	2.6
	2020	23,685	22,940	96.9	745	3.1
	2021	23,389	22,613	96.7	776	3.3
	2009	8,789	8,180	93.1	609	6.9
		·	,			
Saarland	2019	6,999	6,702	95.8	297	4.2
	2020	6,009	5,727	95.3	282	4.7
	2021	5,989	5,692	95.0	297	5.0
	2009	23,816	17,855	75.0	5,961	25.0
		·	,		,	
Saxony	2019	19,519	18,235	93.4	1,284	6.6
•	2020	18,249	16,998	93.1	1,251	6.9
	2021	18,876	17,694	93.7	1,182	6.3
	2009	14,937	11,399	76.3	3,538	23.7
		,	,		-,	
Saxony-Anhalt	2019	10,550	9,850	93.4	700	6.6
-unon-y - unius	2020	9,772	9,162	93.8	610	6.2
	2021	10,290	9,696	94.2	594	5.8
	2009	21,314	20,376	95.6	938	4.4
		21,01	20,070	56.0		
Schleswig-Holstein	2019	20,051	19,569	97.6	482	2.4
	2020	18,427	18,020	97.8	407	2.2
	2021	18,100	17,638	97.4	462	2.6
	2009	13,870	11,237	81.0	2,633	19.0
		10,070	11,237	31.0	2,033	15.0
Thuringia	2019	10,463	9,819	93.8	644	6.2
	2019	9,520	8,888	93.4	632	6.6
	2020	2,320	0,000	JJ.7	032	0.0

Information for 2010 to 2017 can be found in the Report on Vocational Education and Training 2018. Due to revisions, the data may diverge from earlier presentations.
Source: BIBB, survey on 30 September.

In the **shipping** sector, a total of 109 new training contracts were concluded, two more (+1.9%) than in the previous year and eight fewer (-6.8%) than in 2019. **Table 9** shows the number of newly concluded training contracts by training sector and Land for 2021 and developments in the numbers compared with the previous year.

Developments in individual occupations

In 2020, the number of newly concluded training contracts fell for almost all training occupations. Just 20 occupations were identified that did not experience a decline in training contract numbers. ⁸⁰ In 2021, developments for individual occupations were more heterogeneous.

The occupation of tourism agent was once again among the occupations that experienced the sharpest falls in 2021. Having already fallen by 58.8% in 2020 compared to 2019, newly concluded training contracts for this occupation dropped again by 36.9% in 2021 compared to 2020. The occupations of precision machinist, tools mechanic, and milling machine operator were also among the occupations which experienced the steepest relative falls in contract numbers in both 2021 and 2020.

That said, there are also occupations which were on the list of those with the steepest relative declines in 2020, but which are among the occupations which experienced the strongest relative gains in 2021. These include: florist, digitalisation management clerk, freight forwarding and logistics services clerk, machine and plant operator, and personnel services clerk. The occupation of management assistant for e-commerce, which grew by 27.0% in 2021, experienced the largest relative rise in newly concluded training contracts compared to 2020.81

Contracts for training in and outside companies

Of the 473,063 new training contracts concluded nationwide, 456,551 were for training in companies (96.5%) and 16,512 were for non-company training places (3.5%).⁸² Compared with the previous year's figure, the number of new contracts for company-based training rose by 3,956 (+0.9%) in 2021, but remained well below the figure for 2019 (-54,120 contracts or -10.6%). The number of contracts for non-company training increased by 1,622 contracts (+10.9%) in 2021.

After a continuous rise in the percentage of training places in companies since 2009, the proportion of company-based training contracts relative to all contracts was slightly lower both in 2020 and in 2021 than it was in the year before (see **Table 10**).

The percentage of non-company training places remains higher in eastern Germany than in western Germany.

Earlier Reports on Vocational Education and Training have pointed out that this does not mean that the training market situation there remains less favourable. Instead, it is the result of a different approach to dealing with unsuccessful training applicants. Young people in western Germany who have not been able to find a training place mainly have access to courses in the transition sector leading to partial qualifications. In eastern Germany, partly in response to a training market situation that was significantly worse for many years, many more school-based vocational training places or non-company vocational training places leading to full qualifications are available.

In response to demographic change and a related fall in demand for training places, the number of non-company vocational training places has been deliberately reduced in recent years. In 2009, all eastern Länder still recorded double-digit percentages of non-company training places (with the highest figure in 2009 being 25.4% in Brandenburg), but in 2019, the

⁸⁰ See Oeynhausen, Stephanie; Milde, Bettina; Ulrich, Joachim Gerd; Flemming, Simone (2020): Die Entwicklung des Ausbildungsmarktes im Jahr 2020. Analysen auf Basis der BIBB-Erhebung über neu abgeschlossene Ausbildungsverträge und der Ausbildungsmarktstatistik der Bundesagentur für Arbeit zum Stichtag 30. September (The development of the training market in 2020. Analyses on the basis of the BIBB survey of newly concluded training contracts and the Federal Employment Agency's training market statistics on 30 September) (bibb.de/ausbildungsmarkt2020).

⁸¹ For a more detailed presentation of the key developments in the training market in 2021, including trends in individual occupations, see Schuß, Eric; Christ, Alexander; Oeynhausen, Stephanie; Milde, Bettina; Flemming, Simone; Granath, Ralf-Olaf (2021): Die Entwicklung des Ausbildungsmarktes im Jahr 2021. Analysen auf Basis der BIBB-Erhebung über neu abgeschlossene Ausbildungsverträge und der Ausbildungsmarktstatistik der Bundesagentur für Arbeit zum

Stichtag 30. September (The development of the training market in 2021. Analyses on the basis of the BIBB survey of newly concluded training contracts and the Federal Employment Agency's training market statistics on 30 September) (bibb.de/ausbildungsmarkt2021).

⁸² It is the financing form and not the place of learning that is definitive for this classification, so "non-company training places" are those that are mainly publicly financed.

Table 12: Trend in numbers of company-based training places by training sector

	5009	2016	2017	2018	2019	2020	2021	Development 2020–2021	oment 2021	Development 2019–2021	oment 2021
Nationwide	536,272	546,283	556,395	574,185	563,808	512,543	519,727	7,184	1.4%	-44,081	-7.8%
Trade and industry	319,266	320,129	324,216	336,107	327,735	288,206	×				
Skilled trades	143,754	149,591	153,238	157,353	154,133	145,608	×				
Professional services	43,457	46,637	47,591	49,241	50,556	47,217	Х				
Public service	13,732	13,898	14,412	14,703	15,243	15,219	X				
Agriculture	12,797	13,074	13,316	13,220	13,061	13,252	×				
Other sectors, no information ¹⁾	3,266	2,954	3,622	3,561	3,080	3,041	×				
Western Germany	457,363	469,421	478,150	492,936	484,548	437,431	441,496	4,065	%6.0	-43,052	-8.9%
Trade and industry	270,007	274,179	277,550	287,502	281,034	244,838	X				
Skilled trades	125,113	129,615	132,732	136,005	133,192	125,134	×				
Professional services	38,402	41,577	45,644	43,892	45,263	42,271	×				
Public service	10,587	10,937	11,338	11,801	11,974	12,082	×				
Agriculture	10,362	10,609	10,738	10,652	10,407	10,515	×				
Other sectors, no information ¹⁾	2,892	2,504	3,148	3,084	2,678	2,591	×				
Eastern Germany	78,779	76,847	78,203	81,238	79,246	75,100	78,215	3,115	4.1%	-1,031	-1.3%
Trade and industry	49,177	45,943	46,632	48,596	46,690	43,360	×				
Skilled trades	18,640	19,976	20,501	21,348	20,940	20,473	×				
Professional services	5,055	5,058	4,945	5,348	5,292	4,946	×				
Public service	3,145	2,961	3,074	2,902	3,269	3,137	×				
Agriculture	2,435	2,465	2,578	2,568	2,654	2,737	×				
Other sectors, no information ¹⁾	327	444	473	476	401	447	×				

¹⁾ Further differentiation here is not possible.

The time series for 2010 to 2014 can be found in the Report on Vocational Education and Training 2020. x For 2021, company-based places cannot be attributed to training sectors. Sources: BIBB, survey on 30 September; Federal Employment Agency statistics, special analysis made in preparation for the Report on Vocational Education and Training.

Medical assistant 17,153 16,724 Office management clerk Dental assistant 13,202 Salesperson 10,389 Management assistant for retail services 8.984 8,089 Industrial clerk Clerk in public administration 4,798 4.735 Hairdresser 4.285 Tax clerk Wholesale and foreign trade clerk 4,148 3,756 Bank clerk Hotel business specialist 3,518 Salesperson specialising in foodstuffs 3.218 Veterinary assistant 3.195 Legal assistant 2,364 Insurance and financial services broker 2,136 Social insurance clerk 1,846 Optician 1.843 Freight forwarding and logistics services clerk 1.788 Automobile business administrator 1.751 1.672 Property agent 1.668 Health services administrative assistant Pastry cook 1.455 1,448 Cook Architectural draughtsperson 1,447 2.000 10.000 12.000 14.000 18.000 4.000 6.000 8.000 16.000

Chart 6: The 25 occupations under the Vocational Training Act and Crafts Code most frequently chosen by young women in 2021

year before the pandemic, the figures ranged between 4.6% (Berlin) and 6.6% (Saxony-Anhalt and Saxony).

In 2021, the figures ranged from 4.6% (Mecklenburg-Western Pomerania) to 8.2% (Berlin), as **Table 11** shows.

The trend in the supply of company-based training places

Given the difficulties that many companies have in filling the vocational training places they offer,⁸³ it is important to look not only at the trend in the number of newly concluded training contracts but also at the trend in the supply of company-based training places. Newly concluded company-based training contracts and unfilled vocational training places registered with the Federal Employment Agency are taken into account in tracking this trend.

Of the 536,239 vocational training places available nationwide in 2021, 519,727 were company-based. Compared with the previous year, the number of

company-based vocational training places on offer rose by 7,184 (+1.4%). However, this was 44,081 fewer places (-7.8%) than in 2019.

Table 12 shows the trend in the supply of company-based training places by training sector. It should be noted that in this context, too, unfilled vocational training places can only be taken into account if they were registered with the Federal Employment Agency.

Due to a technical error, the Federal Employment Agency is unable to determine the competent body for unfilled training places in 2021. As a result, it is not possible to differentiate between different sectors of company-based training for 2021.

Gender-specific differentiation

Of the 473,063 new training contracts concluded in 2021, 171,562 were concluded with women and 301,356 with men. Women therefore accounted for 36.3% of new training contracts (2019: 36.6%; 2020: 36.4%).

⁸³ See also Chapter 2.4.1.

Motor vehicle mechatronics technician 19,712 Information technology specialist 14,462 Plant mechanic for sanitary, heating, 14,068 and air-conditioning systems 13,954 Electronics technician Salesperson 10,374 Management assistant for retail services 10,281 Industrial mechanic 9.182 Warehouse logistics operator 8,785 7.097 Mechatronics fitter 7,032 Wholesale and foreign trade clerk 6,872 Office management clerk 6,709 Industrial clerk 6.309 Painter and varnisher 6.236 Electronics technician for industrial engineering 5,925 Inventory clerk 5.210 Cook 4.786 Gardener 4.692 Carpenter 4,425 4,299 Metalworker Roofer 3,918 3,865 Bank clerk 3,862 Bricklaver Milling machine operator 3,762 Machine and plant operator 3.656 20.000 10.000 15,000 25,000 5,000

Chart 7: The 25 occupations under the Vocational Training Act and Crafts Code most frequently chosen by young men in 2021

Among the seven training sectors, the professional services sector had the highest relative proportion of contracts concluded with women, at 91.2%, followed by the housekeeping sector (84.0%) and the public service (63.0%). In the trade and industry sector, 34.4% of new contracts were concluded with women. The proportion of women starting training in agriculture (26.1%), the skilled trades (18.4%) and shipping (12.8%) was fairly low.

Women are not just under-represented in dual vocational training; they are also concentrated in fewer training occupations. In 2021, 73.2% of all the young women starting training did so in just 25 occupations, while 62.9% of all men started training in one of the 25 occupations most frequently chosen by young men.

Chart 6 and **Chart 7** show information on the 25 occupations most often chosen by young women and by young men.

After significant falls in 2020, both genders recorded slight growth in the number of newly concluded training contracts in 2021 in absolute terms. The number of new training contracts concluded with men rose by 4,148 (+1.4%) to 301,356 in 2021. However, this was still 31,274 lower (-9.4%) than in 2019. The number of new training contracts concluded with women increased by 1,333 contracts (+0.8%) to 171,562, which is 20,834 fewer (-10.8%) than in 2019.

The more long-term decline in the number of new training contracts concluded with women (see **Chart 8**) has already been the subject of past Reports on Vocational Education and Training. ⁸⁴ One cause is declining demand from women for dual vocational training. Far more women are in school-based vocational training, for example, especially in training for healthcare, education, and social services occupations. ⁸⁵

⁸⁴ See the Report on Vocational Education and Training 2019, Chapter 2.2.2.4, and the Report on Vocational Education and Training 2020. Chapter 2.3.1.2.

⁸⁵ See Chapter 2.3.1.

B New training contracts concluded with men A New training contracts concluded with women 350,000 335,523 332,630 330,000 337,543 325.095 325 648 322,287 310,000 316,146 315,231 313,467 301,356 290,000 270,000 250.000 230,000 234,865 231,837 224,095 214,311 209,734 207,636 204,126 210,000 197,642 195,890 192,396 190,000 170,000 171,562 170,229 150,000 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Chart 8: Developments in newly concluded training contracts by gender

Occupations requiring two years of training

In 2021, 39,749 new training contracts were concluded nationwide for occupations requiring two years of training as standard⁸⁶, which is 410 (-1.0%) fewer than in 2020 and 4,573 (-10.3%) fewer than in 2019 (see **Chart 9**). Training places in occupations requiring two years of training made up 8.4% (2019: 8.4%; 2020: 8.6%) of the total number of training places.⁸⁷

In western Germany, 31,509 new contracts were concluded in occupations requiring two years of training, a fall of 916 (–2.8%). In eastern Germany, the number of new contracts concluded in occupations requiring two years of training increased by 506 (+6.5%) to 8,240.

The occupation requiring two years of training which had the most training contracts, that of salesperson,

In 2021, the proportion of new training contracts concluded in occupations requiring two years of training was again higher in eastern Germany, at 11.5%, than it was in western Germany, at 7.9%. The fact that comparatively more new contracts were concluded in occupations requiring two years of training in eastern Germany than in western Germany is a result of the higher proportion of non-company training places in eastern Germany, as non-company training is often provided for occupations requiring two years of training. In 2021, 11.3% of new training contracts concluded in eastern Germany for occupations requiring two years of training were for mainly publicly financed ("non-company") forms of training.88 This figure has fallen steadily in recent years, although in 2020 and 2021 it rose slightly in western Germany.89

⁸⁶ Examples of occupations requiring two years of training include: salesperson, specialist in the hospitality services industry, service specialist in dialogue marketing, skilled express and postal services employee, building construction worker, machine and plant operator, inventory clerk, and metals technology specialist.

⁸⁷ Over a longer period, the percentages have developed as follows: 2009: 9.2%; 2010: 9.5%; 2011: 9.1%; 2012: 9.0%; 2013: 8.7%; 2014: 8.6%; 2015: 8.6%; 2016: 8.4%; 2017: 8.5%; 2018: 8.6%; 2019: 8.4%.

⁸⁸ Eastern Germany: 2011: 37.1%; 2012: 30.6%; 2013: 27.3%; 2014: 26.0%; 2015: 22.3%; 2016: 18.2%; 2017: 15.4%; 2018: 13.1%; 2019: 12.9%; 2020: 12.6%; 2021: 11.3%.

⁸⁹ Western Germany: 2011: 10.9%; 2012: 9.5%; 2013: 8.9%; 2014: 8.5%; 2015: 7.9%; 2016: 7.3%; 2017: 6.5%; 2018: 5.4%; 2019: 5.0%; 2020: 6.0%; 2021: 7.2%.

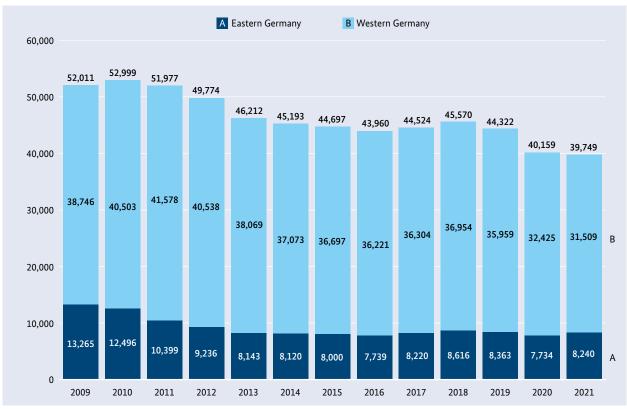


Chart 9: Newly concluded training contracts in occupations requiring two years of training

saw a fall in the number of newly concluded training contracts of 693 (-3.2%) to 20,767 compared to 2020. The occupation with the second-largest number of new contracts was that of inventory clerk, with a total of 5,708, which is 384 more (+7.2%) than in 2020. The occupation requiring two years of training which ranked in third place, that of machine and plant operator, also recorded a rise in the number of newly concluded training contracts compared with the previous year (+437 or +12.7 % to 3,883). Last year, this occupation was among the occupations requiring two years of training that experienced the steepest relative falls (-23.7%). In the occupation of specialist in the hospitality services industry, which recorded a fall of 24% in 2020, the number of newly concluded training contracts declined by 74 (-4.4%) to 1,621 in 2021.

Vocational training for people with disabilities

To enable people with disabilities to participate in working life, the Vocational Training Act (section 64) and Crafts Code (section 42p) stipulate that they should be trained in recognised training occupations,

with the particular circumstances of people with disabilities being taken into account. The laws specify that, in principle, people with disabilities should mainly be provided with training in companies or with training in which companies are as closely involved as possible. In this context, provision must be tailored to the particular needs of people with disabilities. People with disabilities can and should primarily conclude contracts for training in state-recognised training occupations. The relevant statistics (the BIBB survey on 30 September and the vocational training statistics of the federal and Länder statistical offices on 31 December) do not record personal characteristics such as a disability, so no data is available on this. 90

⁹⁰ See Gericke, Naomi; Flemming, Simone (2013): Menschen mit Behinderungen im Spiegel der Berufsbildungsstatistik. Grenzen und Möglichkeiten (People with disabilities as reflected in the vocational training statistics. Limits and opportunities). Bonn (bibb. de/dokumente/pdf/ab21_dazubi_Kurzpapier_Menschen_mit_Behinderung_in_der_Berufsbildungsstatistik_201306.pdf) and the Data Report accompanying the Report on Vocational Education and Training 2016, Chapter A 4.1.4.

For people whose type and degree of disability makes training in a recognised training occupation impossible, the relevant authorities (under section 66 of the Vocational Training Act or section 42r of the Crafts Code) should, at the request of the disabled person or their legal representatives, develop special training regulations based on the content of recognised training occupations, known as "specialist training". In 2021, 6,969 new training contracts were concluded nationally on the basis of section 66 of the Vocational Training Act or section 42r of the Crafts Code (2020: 7,234; 2019: 7,669). This represents 1.5% of all newly concluded training contracts. The proportion was 1.5% in both of the previous years as well.

The Federal Employment Agency supports young people with and without disabilities as they start working life. The participation of people with disabilities in working life is primarily promoted using general labour-market policy services, especially support for company-based vocational training. If special services are necessary due to the type and degree of disability, or to ensure participation in working life, support is provided for participation in a programme at an institution for people with disabilities (e.g. a vocational training centre) or another programme tailored to the particular needs of people with disabilities. In the 2021 budget year, the Federal Employment Agency once again made promoting the participation of people with disabilities in working life a priority, with a spending volume of around 2.6 billion euros.

It remains the case that all economic sectors, including the public service, are required to develop and actively offer vocational training for people with disabilities both on the basis of section 64 of the Vocational Training Act or section 42p of the Crafts Code and on the basis of section 66 of the Vocational Training Act or section 42r of the Crafts Code. Only in this way can it be ensured that people with disabilities have access to an equally diverse range of vocational training programmes as people without disabilities.

2.3.2.3 The schooling background of trainees with newly concluded training contracts

Statements on the schooling background of trainees with newly concluded training contracts cannot be made on the basis of data from the BIBB survey of newly concluded training contracts on 30 September because the survey does not record schooling background. The vocational training statistics produced by the federal and Länder statistical offices (vocational training statistics on 31 December) are therefore used as a source below. The most up-to-date data available is that for 2020.

In 2020, the first year of the coronavirus crisis, trainees with an intermediate school-leaving certificate (41.3%) were once again the largest group among all trainees with newly concluded training contracts (women: 40.9%; men: 41.5%). 24.3% of all new trainees had a secondary general school certificate (women: 19.3%; men: 27.2%). The proportion of trainees with newly concluded training contracts who did not have a secondary general school certificate was 3.3 % (women: 2.4 %; men: 3.7 %). Furthermore, 29.2% of new training contracts were concluded with people with a higher education entrance qualification (women: 35.6%; men: 25.6%). The proportion of trainees with newly concluded training contracts whose schooling background fell into the category of "School-leaving qualification gained outside Germany that cannot be classified" was 1.9% in the reporting vear.91

The trend towards higher-level school-leaving qualifications continued in 2020, although it was less pronounced. Compared to the previous year, the proportion of trainees with newly concluded training contracts who had an intermediate school-leaving certificate rose (+0.6 percentage points), while the percentage who had a secondary general school certificate remained stable, and the proportion who did not have a secondary general school certificate

⁹¹ The proportions of general school-leaving qualifications shown differ from those in earlier Reports on Vocational Education and Training due to a change in the calculation method. From the 2019 reporting year, the school-leaving qualification category of "School-leaving qualification gained outside Germany that cannot be classified" is included in the percentages (including retroactively). For more information on the change in the calculation method, see Kroll, Stephan (2020) at: bibb.de/dokumente/xls/dazubi_zusatztabellen_berechnung-schulabschlussanteile.xlsx and the 2022 Data Report, Chapter A 5.5.1.

declined slightly (-0.2 percentage points). 92 In 2020, the proportion of trainees with newly concluded training contracts who had a higher education entrance qualification dropped slightly for the first time in years (-0.1 percentage points); however, it must be kept in mind that no one left school with an Abitur (higher education entrance qualification) in Lower Saxony in 2020 due to the switch from an eight-year to a nine-year Abitur in that Land. This resulted in an above-average fall in the number of new training contracts concluded with people with a higher education entrance qualification in Lower Saxony, and this has a significant impact on the nationwide trend. If Lower Saxony is excluded from the calculations, 2020 once again saw a slight rise in the proportion of new trainees with a higher education entrance qualification.93

More in-depth analyses of trends in the schooling background of trainees in 2020, the first year of the coronavirus pandemic, including a breakdown by training sector, is provided by a recent BIBB publication, which studies in detail the developments in newly concluded training contracts in 2020 on the basis of the vocational training statistics on 31 December.⁹⁴

When viewed over a longer period, there is a very distinct trend towards trainees beginning dual vocational training with higher-level general school-leaving qualifications (see **Chart 10**). Compared to 2010 (20.9%), the proportion of new trainees with a higher education entrance qualification has grown substantially (2020: 29.2%), while the share of trainees with a new training contract who have a secondary general school certificate has fallen markedly (2010: 32.7%; 2020: 24.3%). The percentage of new trainees with an intermediate school-leaving certificate has remained fairly stable over time, declining only slightly by comparison with 2010 (2010: 42.7%; 2020: 41.3%).

92 The proportion accounted for by the category of "School-leaving qualification gained outside Germany that cannot be classified" declined slightly in 2020 by comparison with 2019 (-0.2 percentage points).

The figure for trainees with newly concluded training contracts who do not have a secondary general school certificate has fluctuated marginally around the 3% mark since 2010.

The proportions of different school-leaving qualifications held by young people with new training contracts in the various training sectors⁹⁵ were widely disparate.⁹⁶

In the trade and industry sector, young people with an intermediate school-leaving certificate were the largest group (40.7%) among trainees with new training contracts in 2020, followed by young people with a higher education entrance qualification (34.8%) and those with a secondary general school certificate (19.7%). 3.0% had no secondary general school certificate.

In the skilled trades sector, 41.4% of trainees with a newly concluded training contract had an intermediate school-leaving certificate, 36.7% had a secondary general school certificate, and 15.7% had a higher education entrance qualification. 4.1% had no secondary general school certificate.

In the professional services sector, young people with an intermediate school-leaving certificate made up the largest group (46.5 %) among trainees with new contracts. 29.4 % had a higher education entrance qualification, 20.2 % had a secondary general school certificate, and 1.1% had left school without a secondary general school certificate.

In agriculture, new trainees with an intermediate school-leaving certificate were the largest group (38.6%). 28.1% had a secondary general school certificate, and 25.9% a higher education entrance qualification. However, a comparatively large number of young people without a secondary general school certificate (6.5%) also concluded new training contracts in this sector.

More than half of new trainees in the public service sector had a higher education entrance qualification (54.1%), 41.7% had an intermediate school-leaving certificate, 3.8% had a secondary general

⁹³ See also the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 5.5.1.

⁹⁴ Kroll, Stephan (2021): Einmündung in eine duale Berufsausbildung in Zeiten der Corona-Pandemie: deskriptive Analysen zu den neu abgeschlossenen Ausbildungsverträgen 2020 auf Basis der Berufsbildungsstatistik (Placement in dual vocational training during the coronavirus pandemic: descriptive analyses of newly concluded training contracts in 2020 on the basis of the vocational training statistics). Version 1.0, Bonn (https://res.bibb.de/vet-repository_779650).

⁹⁵ Trainees in the shipping sector have not been recorded in the vocational training statistics since 2008, so no figures on them are available.

⁹⁶ For absolute figures, see the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 5.5.1.

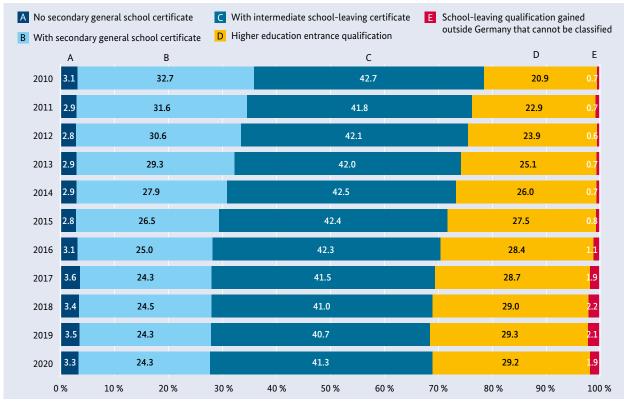


Chart 10: Schooling background of trainees with newly concluded training contracts

Source: BIBB "Database of trainees", based on data from the vocational training statistics of the federal and Länder statistical offices (data as at 31 December).

school certificate, and 0.2 % had no secondary general school certificate.

The housekeeping sector recorded the highest proportion of young people with a secondary general school certificate (54.2%) among new trainees. The number of new trainees with no secondary general school certificate was also much higher in this sector than it was in other sectors (28.8%). 13.5% of new trainees had an intermediate school-leaving certificate, and 1.7% had a higher education entrance qualification.

Compared with the 2010 figures, the proportion of young people with a secondary general school certificate has fallen in almost all training sectors, ⁹⁷ while the percentage of those with a higher education entrance qualification has grown. That said, this development must be seen in the context of falling numbers of young people leaving general schools with

a secondary general school certificate, which is caused by the trend towards higher-level general school-leaving qualifications and structural changes in the school system.⁹⁸

2.3.3 Training for occupations outside the dual system: new trainees in healthcare occupations

Training in healthcare occupations is provided at health-sector schools, which provide the necessary theoretical and practical tuition, and – due to the various structures that make up Germany's federal education and training system – also at full-time vocational schools and trade and technical schools. Nursing and care professions make up the largest field of training in this context.

⁹⁷ The professional services sector is an exception: the proportion of young people with a secondary general school certificate has risen slightly in this sector (from 16.1% in 2010 to 20.2% in 2020).

⁸⁸ Such as the consolidation of secondary general schools and intermediate schools

In the 2020/2021 school year, the healthcare occupations listed in **Table 13**, excluding vocational training for the nursing and care professions regulated by federal law, had a total of 41,598 first-year trainees (2.9% fewer than in the previous year). The proportion of male trainees was almost unchanged compared to the previous year, at 29.4% (2019/2020 school year: 28.9%).

These healthcare professions saw very disparate trends in the number of first-year trainees in the 2020/2021 school year. The largest rise in numbers of first-year trainees compared with the year before was recorded in the smallest group of trainees, those training to be orthoptists (+35.7%). The proportion of male trainees in orthoptics rose from 7.1% to 10.5% compared to the previous year. The biggest fall in trainees was recorded in training to become midwives and obstetric nurses (–23.2%). This fall is due to the conversion of this vocational training into a dual work-study programme with effect from 1 January 2020.

There was a moderate increase in the number of first-year trainees for the following occupations: occupational therapist (+5.8 %), medical X-ray technician (+4.7 %), medical laboratory technician (+4.6 %), paramedic (+3.1 %), speech therapist (+2.6 %), physiotherapist (+1.2 %), dietician (+1.1 %), and massage therapist and balneotherapist (+0.9 %). Another possible path into some healthcare occupations is through pilot higher education courses, which are now possible in the fields of physiotherapy, occupational therapy, and speech therapy, and under the Act on the Paramedic Profession (Notfallsanitätergesetz).

The number of first-year trainees remained unchanged for the occupation of medical functional diagnostics technician (±0%), while the number fell for the occupations of pharmaceutical technician (–5.1%) and podiatrist (–17.1%). In the previous year, the occupation of podiatrist had recorded growth of 25.8%.

The total number of trainees in their first year of training to be geriatric nursing assistants, general nursing assistants, and nursing and care assistants, for which training is regulated by the laws of the individual Länder, fell by 7.9% compared with the previous year, after experiencing a rise of 7.7% the year before. The proportion of male trainees rose slightly from

29.2% to 30.2% by comparison with the previous year's figures.

Since 1 January 2020, the previous vocational training programmes to qualify as a geriatric nurse, general nurse, and paediatric nurse have been consolidated by the Care Professions Act (Pflegeberufegesetz) into a generalist form of care and nursing training. Trainees who want to specialise in caring for older people or for children and young people can choose whether – instead of continuing the generalist training – they wish to obtain a separate qualification in geriatric nursing or in paediatric nursing.

Trainees in these nursing and care professions form the largest group within the healthcare occupations. Since 1 January 2020, data about trainees whose training is governed by the Care Professions Act has been collected and published as part of the statistics pursuant to the Ordinance on the Funding of Vocational Training for Care Professions (Statistik nach der Pflegeberufe-Ausbildungsfinanzierungsverordnung). A comparison with the 2019/2020 school year, for which subject-matter series 11, series 2, "vocational schools" is used due to the lack of other figures, is only possible to a limited extent due to differences in the data collection processes and reference dates.

If the number of first-year trainees in the 2019/2020 school year is compared with the number of new entrants in 2020, it can be assumed that there has been an increase of around 2%. In 2021, according to preliminary figures produced by the Federal Statistical Office, the number of new entrants has risen further, by 7%, from 57,294 to 61,458, compared to the previous year (see **Table 14**). It can therefore be assumed that there is a continuing positive trend in trainee numbers in the skilled care and nursing professions. In addition, since the Care Professions Act entered into force at the start of 2020, vocational training programmes have been joined by higher education programmes awarding primary qualifications in care and nursing, for which no separate figures are yet available.

In 2021, the number of people who, with employment agency and jobcentre funding, began continuing vocational education and training programmes leading to a qualification as a general nurse rose by roughly 500 compared to the previous year, to around

Table 13: First-year trainees in healthcare occupations, excluding training for nursing and care professions regulated by federal law

		т	First-yea otal new entr	r trainees/ ants nationw	ide	,	Changes in 2020/2021
Training occupations		2019/2020			2020/2021		compared with the
	Total	Male	Female	Total	Male	Female	previous year
Nursing and care assistance occupations (general nursing assistant, geriatric nursing assistant, nursing and care assistant)	16,011	4,683	11,328	14,751	4,458	10,296	-7.9%
Dietician	534	60	477	540	75	465	+1.1%
Occupational therapist	4,122	519	3,603	4,362	546	3,816	+5.8 %
Midwife/obstetric nurse	1,203	3	1,200	924	3	921	-23.2%
Speech therapist	1,476	102	1,374	1,515	111	1,404	+2.6%
Massage therapist and balneotherapist	633	330	303	639	342	297	+0.9%
Medical functional diagnostics technician	162	45	117	162	42	120	±0%
Medical laboratory technician	1,305	273	1,032	1,365	237	1,128	+4.6%
Medical X-ray technician	1,206	321	888	1,263	345	918	+4.7 %
Paramedic	2,772	1,764	1,008	2,859	1,716	1,143	+3.1%
Orthoptist	42	3	39	57	6	51	+35.7%
Pharmaceutical technician	3,936	657	3,279	3,735	576	3,156	-5.1%
Physiotherapist	8,799	3,534	5,265	8,901	3,714	5,187	+1.2 %
Podiatrist	633	78	558	525	66	459	-17.1%
Total	42,834	12,372	30,471	41,598	12,237	29,361	-2.9%

Source: Federal Statistical Office: subject-matter series 11, series 2, table 2.9, 2019/2020 and 2020/2021 school years. In subject-matter series 11, series 2, the results for Saxony-Anhalt (from the 2018/2019 school year onwards) and the results for North Rhine-Westphalia and the national results (from the 2019/2020 school year onwards) have been rounded to a multiple of three to render them anonymous. From the 2019/2020 school year onwards, people who state their gender as "other" or "not stated" are assigned to the male gender or randomly to the categories "male" and "female". As a result, there are rounding effects.

8,100. The nursing and care professions rank in first place, at 13.1%, among all programmes leading to a qualification for which funding was provided. 36.4% of all new entrants for whom wage subsidies were paid were employees in nursing and care professions. Given the long duration of the programmes, the nursing and care sector accounts for the largest proportion, at around 60%, of all occupational groups for which wage subsidies are paid.

2.3.4 Training for occupations outside the dual system: new trainees in social services and education occupations

In the vast majority of cases, the route into early childhood education, childcare, and special needs care and education occupations involves school-based vocational training that is regulated by the law of the individual Länder. It is also possible to undertake a higher education programme, for example, in education or early childhood education. The traditional training occupations include the state-certified or state-recognised vocational training to qualify as an early

Total

Training occupations	Total nev	st-year traine w entrants nat 1/2020 school	ionwide,	New entrants, 2020 calendar year ²	Change compared to previous year	New entrants, 2021 calendar year ³	Change compared to previous year
	Total	Male	Female	Total		Total	
Geriatric nurse	27,309	7,593	19,716	-	-	-	-
Registered general nurse	25,728	5,700	20,028	-	-	-	-
Paediatric nurse	3,081	144	2,937	-	-	-	-
Goneral purso	_	_	_	57 204	_	61 450	

Table 14: First-year trainees in skilled nursing and care professions

56,118

42,681

57,294

+ around 2%

61,458

+ around 7%

13,437

childhood educator, which takes place at social education schools. There are also the state-recognised training programmes to qualify as a social assistant, a social and educational assistant, or a childcare worker, which take place at full-time vocational schools. These vocational training programmes for assistant occupations require an intermediate school-leaving certificate or a secondary general school certificate, usually have a two-year duration, and lead to a qualification at Level 4 of the German Qualifications Framework.

The qualifications of state-certified or state-recognised early childhood educator and special needs care worker are on a level equivalent to a bachelor's degree. They usually build on training for the relevant assistant occupations; other initial training programmes can also meet the admission requirements. Special needs education is another advanced vocational qualification which builds on the qualification of special needs care worker.

For the occupation of special needs care worker, the Conference of Ministers of Education and Cultural Affairs has set up a working group modelled on the process of upgrading the occupation of early childhood educator, and in 2021 the working group revised

the vocational training to qualify as a state-recognised special needs care worker. A skills-based qualification profile has been developed and the provisions in the Framework Agreement on Trade and Technical Schools have been revised accordingly, and both were adopted by the Conference of Ministers of Education and Cultural Affairs in December 2021. A more sharply defined occupational profile, consistent nationwide training standards, and close integration of the settings for theoretical and practical learning are intended to boost the occupation's attractiveness.

Table 15 shows people who started training in selected social services and education occupations in the 2020/2021 school year, when there were a total of 78,741 new trainees. This represents a slight fall compared to the previous year (–3.8%), which extends to almost all occupational groups, but numbers remain at a high level.

The "other childcare and early childhood education occupations" category has been eliminated, as the new trainees in this category have been assigned to the other early learning and childcare occupations. The changes in the figures compared to previous years must be seen in this light. For example, the recorded 14.1% growth in early childhood educators is due to

¹ Source: Federal Statistical Office: subject-matter series 11, series 2, table 2.9, 2019/2020 school year. In subject-matter series 11, series 2, the results for Saxony-Anhalt (from the 2018/2019 school year onwards) and the results for North Rhine-Westphalia and the national results (from the 2019/2020 school year onwards) have been rounded to a multiple of three to render them anonymous. From the 2019/2020 school year onwards, people who state their gender as "other" or "not stated" are assigned to the male gender or randomly to the categories "male" and "female". As a result, there are rounding effects.

² Source: Federal Statistical Office: 2020 statistics pursuant to the Ordinance on the Funding of Vocational Training for Care Professions (Pflegeberufe-Ausbildungsfinanzierungsverordnung) (reference date: 31 December 2020), table 1.3.1.

³ Source: Federal Statistical Office press release: 2021 statistics pursuant to the Ordinance on the Funding of Vocational Training for Care Professions (reference date: 31 December 2021), accessible at destatis.de/DE/Presse/Pressemitteilungen/2022/03/PD22_135_212.html.

Table 15: First-year trainees in selected social services and education occupations

		,	First-year trai	nees nationwi	de		Change in
Training occupations		2019/2020			2020/2021		2020/2021 compared to
	Total	Female	Male	Total	Female	Male	previous year
Early childhood educator	34,956	27,792	7,164	39,894	32,160	7,734	+14.1%
Social and educational assistant/ childcare worker	13,497	11,061	2,436	12,906	10,716	2,190	-4.4%
Social assistant	18,582*	13,986	4,596	17,799**	13,470	4,326	-4.2%
Other childcare and early childhood education occupations*	6,126	5,250	876	*			
Special needs care assistant	1,254	849	405	1,263	852	411	0.7%
Special needs care worker	6,471	4,515	1,956	6,171	4,266	1,905	-4.6%
Special needs teacher	951	837	114	708	606	102	-25.6%
Total	81,837	64,290	17,547	78,741	62,070	16,668	-3.8%

^{*} This category was used by Baden-Württemberg in the 2019/2020 school year for vocational training programmes which could not be clearly categorised. For the 2020/2021 school year, it was possible to assign them to the categories of early childhood educator and social and educational assistant/childcare worker.

Source: Federal Statistical Office: subject-matter series 11, series 2, table 2.9, 2019/2020 and 2020/2021 school years.

this. The proportion of men in the selected social services occupations remained almost unchanged, at 21.2%. Out of these occupations, the lowest proportion of women is in the training to become a special needs care assistant, at 67.4%.

The occupation with the largest group of new trainees is early childhood educator, at 39,894. The proportion of male trainees remained constant relative to the previous year, at 19.4%. By comparison with the 2007/2008 school year, when there were 20,918 new entrants in training to qualify as an early childhood educator, high levels of growth have since led to training capacities almost doubling.

Paid training formats with integrated practical elements are still in the process of being developed; they are intended to attract additional target groups, given the continuing rise in demand for skilled workers in the social services and educational occupations, and will involve trainees working in organisations at an earlier stage.

2.3.5 Training for occupations outside the dual system: training in public service occupations

Data on public service⁹⁹ personnel is collected annually on the reference date of 30 June in the framework of the Federal Statistical Office's statistics of public service personnel.

Training in the public service is provided not only in special public service occupations but also in occupations registered with the chambers of industry and commerce or the chambers of crafts, as well as in healthcare occupations. The Federal Statistical Office's statistics of public service personnel also count civil servants in the practical phase of training and trainee civil servants as people in training.

According to these statistics, around 262,600 people (2019: 250,700) were training in the public service on

^{**} Please note: for data protection reasons, the data (absolute figures) has been rounded in some cases. The total value may therefore differ from the total of the individual figures.

⁹⁹ Federation, Länder, municipalities, associations of municipalities, social insurance organisations, the Federal Employment Agency, and legally independent institutions governed by public law.

the reference date of 30 June 2020. 141,200 of these trainees (2019: 136,100) had civil-servant status. 23,900 (2019: 24,000) were training as part of tertiary studies or after completing tertiary studies, without having civil-servant status (e. g. legal trainees). 97,500 (2019: 90,500) trainees were registered in the other training occupations, mainly in training under the Vocational Training Act and Crafts Code or in training for skilled healthcare occupations and as early childhood educators. 100

The majority of trainees in the public service were female, 63.7% (2019: 64.0%), and this figure has increased by 2.8 percentage points since 2007.

2.3.6 Forecast of supply and demand trends in the training market in 2022

How the training market develops depends on a wide range of factors (including cyclical economic and macroeconomic developments, demographic trends, as well as social and structural effects, such as growing or declining interest in dual vocational training, or people's increasing tendency to start tertiary studies).

Based on the results of PROSIMA, the econometric prognosis and simulation model that the Federal Institute for Vocational Education and Training (BIBB) uses to forecast the training market situation, there could be a rise in the number of training places available in 2022, from 536,200 (actual figure in 2021) to 544,600 (point forecast for 2022). The confidence interval of the estimate, with a 5 % probability of error, ranges between 530,400 and 558,800. The background to this is the economic upturn expected in 2022, although it has been held back by the war in Ukraine.¹⁰¹

PROSIMA also forecasts an increase on the demand side. This applies both to demand according to the traditional definition (point forecast: 515,200; actual figure in 2021: 497,700) and demand according to the expanded definition (point forecast: 551,800; actual figure in 2021: 540,900).¹⁰² As the increase in demand is expected to be greater than the increase on the supply side, the supply and demand ratio could deteriorate somewhat, to the detriment of young people looking for training places.

PROSIMA assumes that an increase in the supply of training places in 2022 will also result in more training contracts being concluded. The model forecasts 492,600 new training contracts (point forecast). The number of newly concluded training contracts in 2022 could therefore be slightly higher than in the previous year (actual figure in 2021: 473,100).¹⁰³

However, all of these estimates involve uncertainties that exceed the limits of the econometrically determined confidence intervals.

If supply and demand were successfully matched based on the forecast figure of 492,600 newly concluded training contracts, the number of unfilled places could fall to 52,000 (actual figure in 2021: 63,200). However, if the number of unfilled training places remained at its 2021 level, the model expects there to be only 482,400, rather than 492,600, new training contracts.

A smaller increase in the number of newly concluded training contracts would also be expected if demand for training falls more steeply than forecast in the model on the basis of past empirical values. Future trends in the matching of supply and demand therefore also have a key role to play in the development of the training market in 2022.

¹⁰⁰ See the Data Reports accompanying the Reports on Vocational Education and Training 2021 and 2022 (Chapter A 6.2 in each case).

¹⁰¹ The Annual Economic Report published in January 2022 predicted a 3.6% increase in gross domestic product in price-adjusted terms in 2022 (see https://www.bmwk.de/Redaktion/EN/Publikationen/Wirtschaft/annual-economic-report-2022.html). Russia's invasion of Ukraine in February 2022 changed the situation. Both the war itself, and the sanctions imposed by Western countries, are downgrading growth expectations and causing significant uncertainty. The present forecast assumes a 1.5 % increase in gross domestic product in price-adjusted terms in 2022. A potential suspension of trade in gas is not incorporated in this assumption.

¹⁰² The confidence interval for demand according to the traditional definition is between 501,800 and 528,600, and for demand according to the expanded definition it is between 538,200 and 565,400.

¹⁰³ Lower limit of the confidence interval: 479,200; upper limit of the confidence interval: 506,000.

¹⁰⁴ Lower limit of the confidence interval: 43,000; upper limit of the confidence interval: 61,000.

Although it can be assumed that social distancing restrictions will be eased by comparison with 2020 and 2021, it is conceivable that the training market will face further impacts caused by the coronavirus pandemic and the measures taken to contain it; this is another factor which cannot be predicted by the model.

In addition, there is considerable uncertainty associated with the war in Ukraine and its economic impacts, which can only be forecast to a limited extent.

The number of refugees fleeing the war in Ukraine is also rising. To date, mainly women and children have sought refuge in Germany. However, if it is not possible for them to return to Ukraine in the near future, the number of people interested in vocational training could increase in the next few years.

For a more in-depth presentation of the results of PROSIMA, please see the Data Report accompanying the Report on Vocational Education and Training. ¹⁰⁵

2.4 Developments after the start of training

2.4.1 Unplaced applicants and unfilled training places

For several years, the training market situation has been characterised by two apparently contradictory developments. On the one hand, the difficulties that companies have in filling the training places they offer are growing. On the other hand, too many young people still do not succeed in finding a training place at the first attempt. Earlier Reports on Vocational Education and Training have described the difficulties in matching the training places that companies offer with young people's demand for training as a key training market challenge.

This trend continued in 2021. The restrictions imposed on public life due to the coronavirus pandemic have adversely affected the training market balance. According to Federal Employment Agency statistics, of the 511,282 vocational training places registered nationwide over the 2020/2021 training year, 63,176 had not yet been filled by the reference date of 30 September 2021, 3,228 (+5.4%) more than in the previous year. By comparison with 2019, this represents an increase of 10,039 (+18.9%). Compared with the 2009 figure (17,766), the number of unfilled vocational training places has more than tripled (see Chart 11).

Surveys of companies also show that enterprises are still finding it hard to recruit trainees. The 2021 BIBB Training Panel found that 47% of the companies surveyed were unable to fill some or all of the vocational training places they offered (2020: 46%; 2019: 48%). The figure was slightly below that of the previous year (2019: 48%).

As in earlier years, companies with fewer than 20 employees had more difficulties in filling the training places they offered. The percentage of companies with unfilled vocational training places reduces in inverse proportion to their size (1 to 19 employees: 51%; 20 to 99 employees: 42%; 100 to 199 employees: 29%; large companies with 200 or more employees: 26%).

One possible explanation for this is that young people are more familiar with larger companies, and these companies are more attractive as training providers. They also have more funds available for recruitment campaigns. It is probable that companies that are repeatedly unable to fill the training places they offer become less willing to provide training.

The results of the survey suggest that the difficulties experienced by companies with 20 or more employees have increased recently, while there has been a slight improvement for companies with fewer than 20 employees. The Federal Government will continue to monitor this trend. ¹⁰⁶

¹⁰⁵ See the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 2.

¹⁰⁶ Figures for 2020 for comparison: 1 to 19 employees: 52%; 20 to 99 employees: 37%; 100 to 199 employees: 26%; large companies with 200 or more employees: 23%; see also the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 7.3.

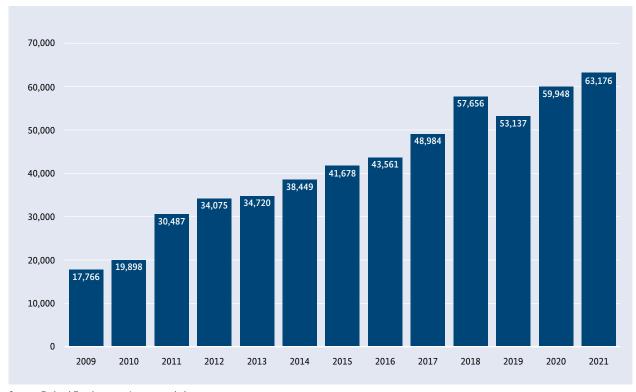


Chart 11: Registered unfilled vocational training places

Source: Federal Employment Agency statistics.

There were 63,176 unfilled vocational training places registered with the Federal Employment Agency, and 24,614 unplaced applicants who were not in training or in an alternative. The number of unplaced applicants thus fell compared to the previous year (–4,735 or –16.1%). It was only slightly above the figure for 2019 (+89 or +0.4%).

The number of applicants who had begun an alternative to vocational training (e.g. pre-vocational training, internship, introductory training, etc.), but were nonetheless still looking for a training place and wanted to be placed in training by an employment agency or jobcentre, fell to 43,204. That is 5,684 (–11.6%) fewer people than in 2020 and 5,992 (–12.2%) fewer than in 2019. The trend in the number of unplaced applicants and of applicants with an alternative to training on 30 September is shown as a time series in **Chart 15** in **Chapter 2.4.2**.

In total, 67,818 applicants still wanted to be placed in training on the reference date of 30 September 2021, 10,419 fewer (–13.3%) than in 2020. The number was higher in 2019 as well, at 73,721. However, these

reductions must be seen in the context of the fall in the overall number of applicants. In relative terms, the percentage of all registered applicants who were still seeking a training place was 15.6%. That is lower than in 2020 (16.5%) but higher than in 2019 (14.4%).

Matching supply and demand in the training market

The proportion of registered unfilled vocational training places relative to all training places that companies offered and the proportion of applicants still looking for a training place as a share of overall demand are important variables in evaluating the extent to which the matching of supply and demand in the training market is succeeding.

The Federal Institute for Vocational Education and Training (BIBB) differentiates three types of training market problems based on the proportion of unfilled vocational training places and the proportion of applicants still seeking training places: supply problems, problems filling training places, and a combination of the two.

In some regions and occupations, it is harder for young people to find training places, while companies can usually fill the training places they offer. Here supply problems predominate. There are, however, other regions and occupations that have a relatively large number of unfilled vocational training places, while young people usually succeed in finding training places. In these cases, companies' problems in filling training places are the main challenge. Supply problems and problems filling training places can also occur simultaneously when the expectations of companies and young people differ or these expectations do not reflect the actual circumstances (for example, in terms of the occupations or regions where places are available or in demand, or other characteristics, such as when young people prefer to train in large companies but training places are offered in small companies).

According to data from the BIBB survey on newly concluded training contracts on 30 September and the Federal Employment Agency training market statistics, the proportion of unfilled training places relative to all training places offered by companies continued to rise in 2021 (2019: 9.4%; 2020: 11.7%; 2021: 12.2%). Here, by definition, only those unfilled training places which are registered with the Federal Employment Agency are included in the figures, so the figures are somewhat lower than they are in surveys of companies. ¹⁰⁷

The proportion of applicants still looking for a training place relative to total demand was, at 12.5%, lower in 2021 than in 2020 (14.3%), and close to reaching the 2019 level (2019: 12.3%).

Better matching supply and demand remains a key challenge. While the situation for young people seeking training places was, on average nationwide, better in 2021 than in the previous year, companies faced greater problems in filling their training places.

The extent to which supply and demand are matched still varies greatly in different regions and occupations.

Regional disparities

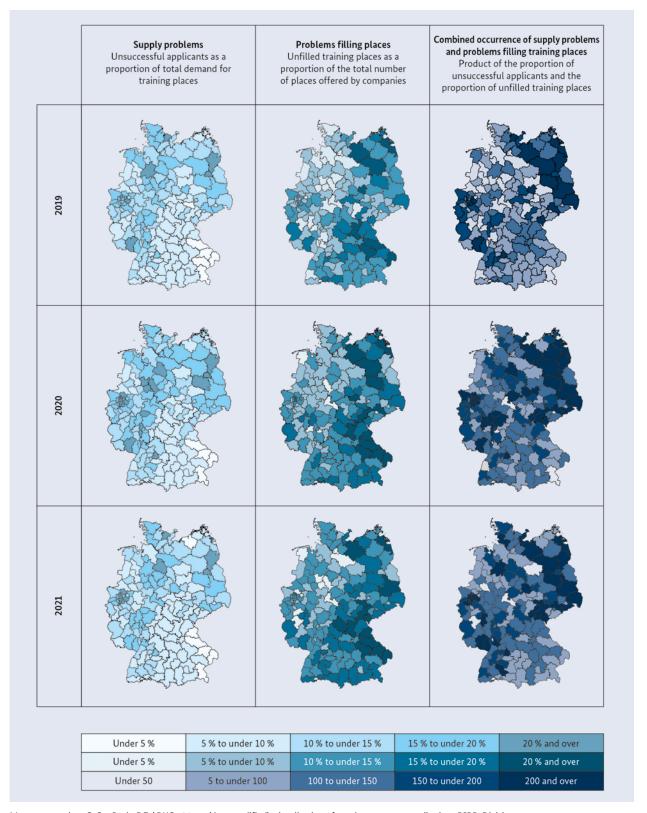
Chart 12 shows the regional disparities, which are considerable in some cases, and the trend in these disparities since 2019.

The growing problems that companies are facing in filling their training places is reflected in the number of affected regions. In 2021, the proportion of unfilled training places relative to the total number of places offered by companies was higher than the 2020 figure in 94 out of the 154 employment agency districts (61.0%). Regarding supply problems, meanwhile, the trend at regional level was more positive. Only 26 of the 154 employment agency districts (16.9%) recorded higher figures than in the previous year. Problems in matching supply and demand increased in 57 of the 154 employment agency districts (37.0%), while they decreased in 97 districts (63.0%).

There is still a need for action in this area. In terms of training policy, action can be taken, on the one hand, to support companies (e.g. effective assistance for companies in filling their training places) and, on the other hand, to support young people, with the goal of successfully placing them in training. Many such support measures have already been developed in recent years, but most require the physical presence of participants, so they could not be held as widely as planned due to restrictions imposed to contain the coronavirus pandemic. Developing and trialling new digital formats therefore remains an important task in the second year of the pandemic.

¹⁰⁷ For example, according to data from the Institute for Employment Research (IAB) Establishment Panel, 26 % of the vocational training places offered remained unfilled in 2019. See Leber, Ute; Schwengler, Barbara (2021): Betriebliche Ausbildung in Deutschland. Unbesetzte Ausbildungsplätze und vorzeitig gelöste Verträge erschweren Fachkräftesicherung (Company-based vocational training in Germany. Unfilled places and premature contract terminations make it difficult to meet the demand for skilled labour) (IAB-Kurzbericht, 3/2021), Nuremberg (iab.de/194/section.aspx/Publikation/K210211HR1).

Chart 12: Regional training market disparities



A 2021 B 2020 45.5 % Salesperson specialising in foodstuffs 46.6 % 44.8 % Restaurant specialist 41.6% Butcher 47.0 % 38.9 % Plumber 41.1 % 36.6 % Skilled express and postal services employee 46.0 % 33.5 % Concrete worker 30.7 % 31.8 % Stonemason and sculptor 24.9 % 30.8 % Specialist in furniture, kitchen, and removal services 23.4 % 30.7 % Scaffolder 29.1 % 30.3 % Professional caterer 36.0 % 0 % 5 % 10 % 15 % 20 % 25 % 30 % 35 % 40 % 45 % 50 %

Chart 13: Occupations with a high proportion of unfilled training places relative to all training places offered by companies in 2020 and 2021 (in %)

Occupations with at least 400 training places offered by companies nationally in 2021 were included in these figures. Sources: BIBB, survey on 30 September; Federal Employment Agency statistics.

Disparities in occupations

Findings from the BIBB survey on 30 September and Federal Employment Agency training market statistics make it possible to identify occupations in which the proportion of unfilled company-based training places relative to all training places offered by companies is particularly high (see **Chart 13**).

At the same time, occupations in which the converse is true can be identified. **Chart 14** shows occupations with high proportions of unsuccessful applicants for training places. When compared to previous years, it is mainly the same occupations that have particularly high proportions of unfilled training places or unsuccessful applicants.

It should be noted that the relative figures shown in **Chart 13** and **Chart 14** are based on different absolute numbers of unfilled training places and applicants looking for training places.

For example, 147 (30.8%) of the 478 training places offered by companies for the occupation of stonemason were unfilled, while that was true of 1,542 (44.8%) of the 3,442 company-based training places for the occupation of restaurant specialist. In the occupation of salesperson specialising in foodstuffs, 3,592 (45.5%) of the total of 7,887 training places offered by companies could not be filled, and this was the occupation with the second-highest number of unfilled training places nationwide in 2021.

The occupation with the most unfilled training places was that of management assistant for retail services, at 5,476 (22.5% of 24,360 company-based training places). However, this occupation also had a relatively large number of applicants still seeking a training

A 2021 B 2020 Animal keeper 49.2 % 43.5 % Visual marketing designer 50.7 % Audiovisual media designer Digital and print media designer Sports and fitness sector business specialist 25.9 % Biology laboratory technician 28.4 % 25.0 % Specialist in media and information services 25.7 % 23.7 % IT system electronics technician 24.2 % 23 0 % Safety and security specialist 24.5 % 23.0 % Vehicle painter 22.3 % 0 % 10 % 20 % 30 % 40 % 50 % 60 %

Chart 14: Occupations with a high proportion of unsuccessful training place applicants in 2020 and 2021 (in %)

Occupations with at least 400 training places offered by companies nationally in 2021 were included in these figures. Sources: BIBB, survey on 30 September; Federal Employment Agency statistics.

place, at 3,679 (16.0% of the total of 22,948 applicants for this occupation), meaning that supply and demand were not matched in this occupation, i. e. it was affected simultaneously by supply problems as well as problems filling training places.

The only occupations which recorded a higher absolute number of applicants still seeking a training place were those of motor vehicle mechatronics technician (4,246 or 17.0% of the total of 24,944 applicants for this occupation), salesperson (4,787 or 18.7% of the total of 25,554 applicants), and office management clerk (4,984 or 17.5% of the total of 28,421 applicants).

Among the occupations listed in **Chart 14**, the occupation of biology laboratory technician had the lowest absolute number of applicants still looking for a training place, at 158 (25.9% of the total of 610 applicants for this occupation). The absolute figure was much higher in the case of the occupation of digital

and print media designer, digital and print media, at 1,100 (32.7% of the total of 3,362 applicants).

Unfilled training places and applicants' schooling background

A secondary general school certificate was the minimum school-leaving qualification required of applicants for more than half (36,567 or 57.9%) of the 63,176 registered unfilled training place. An intermediate school-leaving certificate was the minimum requirement for 16,755 (26.5%) of the unfilled training places, while a Fachhochschulreife (entrance qualification for studies at a university of applied sciences) or Abitur (general higher education entrance qualification) was required for 4,724 unfilled training places (7.5%).¹⁰⁸

¹⁰⁸ A total of 136 unfilled training places (0.2 %) did not require a secondary general school certificate as a minimum requirement. "Not specified" or "Not relevant" applied to 4,994 (7.9 %) of the unfilled training places.

Applicants with an intermediate school-leaving certificate were the largest group (25,335 or 37.4%) among applicants still looking for a training place on the reference date of 30 September, and another 16,853 (24.9%) had a higher education entrance qualification. 20,414 (30.1%) of applicants still looking for a training place had a secondary general school certificate as their highest school-leaving qualification.

Applicants' schooling backgrounds evidently greatly exceed companies' minimum expectations of their trainees' educational qualifications. Companies doubtless do not have any reservations about training applicants with higher school-leaving qualifications, but applicants with higher-level school-leaving qualifications will probably also have higher expectations of the occupations and companies they train in.

Research carried out by the BIBB into young people's career choices has shown that, for almost all of them, doing interesting work is an important factor in choosing a career. Yet for most young people there is also more at stake. They know that their occupation will determine their potential earnings, career prospects, and social status later in life, so the image of specific occupations and their related social status are key issues for young people making career choices. Stereotypical notions of gender roles also still play a role in their decisions.¹⁰⁹

The BIBB has found that it is also important to young people not to seem "uneducated" by working in a specific occupation. This attitude adversely affects occupations in which large numbers of young people with a secondary general school certificate work. Earlier Reports on Vocational Education and Training have drawn attention to this issue. In addition, the number of school leavers with a secondary general school certificate has fallen in recent years. In Occupations and companies affected by this must become more attractive to applicants with higher-level school-leaving qualifications in order to fill their training places.

To attract more potential applicants and retain the trainees they already have, companies are trying to increase the attractiveness of the training places they offer. Research carried out by the Institute for Employment Research (IAB) has found that high rates of employment of former trainees and good pay for trainees expand the pool of suitable applicants and consequently reduce companies' problems in filling the training places they offer.¹¹²

In addition to these factors, which are focused more on the long-term career prospects in the company, many companies now also offer their trainees various extra benefits on top of their training pay. An IAB analysis found that these can include pension contribution subsidies, allowances to support mobility, and bonuses and incentive payments. Data from the 2019 IAB Establishment Panel shows that a total of 63 % of companies providing training make use of these kinds of instruments. The larger the company, the more likely it is to provide extra benefits of this kind. Around nine out of ten large companies that provide training offer at least one extra benefit, while the figure for micro-enterprises providing training was five out of ten. Companies that have problems filling their training places and companies affected by high rates of premature training contract termination are more likely to offer extra benefits than companies that do not face these kinds of difficulties. This may indicate that these companies are actively attempting to work against an impending shortage of skilled workers.113

It should be noted that these findings are based on a survey of companies carried out in 2019, i.e. before the outbreak of the COVID–19 pandemic. However, the problems described above predate the current crisis¹¹⁴ and will continue to pose a challenge for companies after it is over.

¹⁰⁹ See the Report on Vocational Education and Training 2019, Chapter 2.1.3.2, and the Report on Vocational Education and Training 2020, Chapter 2.4.1.

¹¹⁰ See, for example, the Report on Vocational Education and Training 2021, Chapter 2.4.1.

¹¹¹ See Chapter 2.1.1.

¹¹² See Dummert, Sandra; Leber, Ute; Schwengler, Barbara (2019):
Unfilled training positions in Germany – regional and establishment-specific determinants. In: Journal of Economics and Statistics, Vol. 239, no. 4, p. 661–701.

¹¹³ See Leber, Ute; Schwengler, Barbara (2021): Betriebliche Ausbildung in Deutschland. Unbesetzte Ausbildungsplätze und vorzeitig gelöste Verträge erschweren Fachkräftesicherung (Company-based vocational training in Germany. Unfilled places and premature contract terminations make it difficult to meet the demand for skilled labour) (IAB-Kurzbericht, 3/2021), Nuremberg (iab.de/194/section.aspx/Publikation/K210211HR1).

¹¹⁴ See, for example, the Report on Vocational Education and Training 2020, Chapter 2.4.1.

2.4.2 The destination of applicants registered with employment agencies and jobcentres

As described in **Chapter 2.4.1**, at the end of the vocational guidance year, as well as the 24,614 unplaced applicants, the Federal Employment Agency recorded another 43,204 young people for whom placement efforts were also continuing ("applicants with an alternative on 30 September"). These young people had begun an alternative to vocational training in 2020/2021, but they were nonetheless still looking for a training place and wanted to be placed in training by an employment agency or jobcentre.

Compared to the previous year, there was a fall in the number of applicants with an alternative on 30 September 2021 who still wanted to be placed in training (–5,684 or –11.6%). The proportion of applicants with an alternative on 30 September who still wanted to be placed in training relative to all registered applicants was 10.0% in the current reporting year, a slight reduction compared to the previous year (2019: 9.6%; 2020: 10.3%).¹¹⁵

As noted in earlier Reports on Vocational Education and Training, it must be kept in mind that the fundamental criterion underlying the expanded definition of demand is the applicant's continuing desire for a training place, and so the definition adopts the perspective of young people looking for training. Yet not every applicant who still wants to be placed in training lacks a form of training leading to a full qualification. Of the 43,204 applicants with an alternative, 6,736 continued with vocational training they had already begun (1,358 unfunded and 5,378 with funding), and another 938 training place applicants were enrolled in tertiary studies.¹¹⁶

The number of applicants placed in dual vocational training in 2021, at 199,547, fell once again, by 16,609 or 7.7% compared to the previous year. This was a somewhat less sharp fall than in the year before

The proportion of placed applicants relative to all registered applicants was 46.0% in 2021, a slight increase compared to the previous year (2020: 45.7%), but still below the pre-pandemic level (2019: 48.8%). According to the Federal Employment Agency, the continuing low proportion of placed applicants in 2021 could have been influenced not only by pandemic-related restrictions but also by changes in the pool of applicants, with fewer "new applicants" and more "previously unsuccessful applicants". 117

Chart 15 offers a differentiated overview of the post-application destination of applicants registered with the Federal Employment Agency.

The 67,818 applicants in total who were still looking for a training place on 30 September 2021 (24,614 unplaced applicants and 43,204 applicants with an alternative on 30 September) were by no means only young people with low-level school-leaving qualifications. As **Chart 16** shows, 25.7% of the unplaced applicants and 24.4% of the applicants with an alternative on 30 September who still wanted to be placed in training had a higher education entrance qualification. This may be due to the fairly narrow focus of young people with a higher education entrance qualification on just a few occupations and tougher competition in those occupations as a result.

⁽²⁰²⁰ compared to 2019: -33,815 or -13.5%). The number of applicants successfully placed in dual vocational training thus fell below 200,000 in 2021, the second year of the coronavirus pandemic, for the first time since 2009. However, this decline must also be seen in the wider context of the fall in applicant numbers.

¹¹⁵ Trend in this percentage over a longer period: 2009: 13.0%; 2010: 12.2%; 2011: 11.2%; 2012: 10.7%; 2013: 11.1%; 2014: 10.8%; 2015: 10.9%; 2016: 11.0%; 2017: 10.3%; 2018: 10.1%; 2019: 9.6%; 2020: 10.3%; 2021: 10.0%.

¹¹⁶ The very fact that they had applied for training elsewhere shows that the young person was dissatisfied with their situation at some point during the year and may still be (so is at risk of dropping out), and therefore it is entirely justifiable to include these young people in the figures.

¹¹⁷ See also Federal Employment Agency (Bundesagentur für Arbeit) statistics: Berichte. Blickpunkt Arbeitsmarkt – Situation am Ausbildungsmarkt (Reports: Labour Market Overview – Training Market Situation), Nuremberg, November 2021, and Chapter 2.1.2.

Chart 15: Destination of applicants registered with employment agencies or jobcentres on 30 September

				2009	 2016	2017	2018	2019	2020	2021
→	Placement efforts concluded 365,725	→	Placed applicants (Applicants who were placed in training)	260,183	264,447	265,320	261,359	249,971	216,156	199,54
			Of whom: Unfunded	219,919	240,837	244,374	240,241	229,640	196,577	179,69
			Funded	40,264	23,610	20,946	21,118	20,331	19,579	19,8
		→	Other former applicants whose destination is known 1)	111,253	109,276	107,976	106,709	101,723	94,229	89,47
		>	Other former applicants whose destination is unknown Of whom (for information):	102,800	93,402	94,307	88,936	86,384	84,359	76,70
			Registered as unemployed on 30 September			22,594	20,591	20,138	24,847	20,3
•	Placement efforts continuing 67,818	\Rightarrow	Applicants with an alternative on 30 September	73,130	60,053	56,509	54,079	49,196	48,888	43,2
			School 2)	18,609	19,923	20,000	18,965	17,993	18,124	15,7
			Tertiary studies	590	1,614	1,594	1,367	1,218	1,301	9
			Internship	6,546	3,010	2,457	2,096	1,793	1,530	1,1
			Ongoing vocational training	8,231	7,838	6,673	7,061	6,705	7,005	6,7
			Of whom Unfunded	1,350	1,149	1,340	1,421	1,389	1,613	1,3
			Funded	6,881	6,689	5,333	5,640	5,316	5,392	5,3
			Employment	8,038	11,025	11,518	11,521	10,567	10,132	10,1
			Bundeswehr or civilian service	1,198	178	166	113	87	91	
			Federal Voluntary Service or youth voluntary service	1,301	3,798	3,746	3,315	2,870	2,903	2,3
			Pre-vocational training programme	20,272	9,785	8,018	7,516	6,259	6,312	5,0
			Pre-vocational training programme – rehabilitation	85	159	201	226	209	201	2
			Introductory training	4,406	1,951	2,120	1,883	1,482	1,275	8
			Other support	3,831	750	*	12	6	10	
			Other rehabilitation support	23	22	*	4	7	4	
		\Rightarrow	Unplaced applicants	15,510	20,550	23,712	24,540	24,525	29,349	24,6
			Total applicants for vocational training places	562,876	547,728	547,824	535,623	511,799	472,981	433,5

^{*} Numerical value smaller than 3 or corresponding value

Figures for 2010 to 2015 can be found in the Report on Vocational Education and Training 2019.

Applicants for vocational training places are persons registered with an employment agency or jobcentre who sought training in a recognised training occupation in the reporting year and who have been assessed as able to undergo training (young people with the maturity required to undergo training).

Source: Federal Employment Agency statistics (special analysis made in preparation for the Report on Vocational Education and Training (retrospective adjustment of the time series to include "Training for holders of higher education entrance qualifications")).

¹⁾ For the sake of clarity, the alternatives of "other former applicants" for whom placement efforts have concluded are not listed here.

²⁾ From the reference date in August 2019, the Federal Employment Agency has retroactively replaced the earlier "Type of school" classification with the school type classification used by the Conference of Ministers of Education and Cultural Affairs, so the previously reported categories of "Pre-vocational training year" and "Basic vocational training year" are no longer shown separately but are included in the category "School". The time series has been adjusted retroactively, so there may be discrepancies with earlier presentations.

A No secondary general school certificate C Intermediate school-leaving certificate No information B With secondary general school certificate D Higher education entrance qualification R С D Ε Α 40.1 Total applicants 28.1 24.5 46.2 Applicants placed in training 26.9 20.2 28.7 33.7 29.6 Other former applicants Applicants with an 30.0 38.9 24.4 alternative on 30 September 30.2 34.7 Unplaced applicants 0 % 10 % 20 % 30 % 40 % 50 % 60 % 70 % 80 % 90 % 100 %

Chart 16: Schooling backgrounds of applicants registered with employment agencies and jobcentres in 2021

Source: Federal Employment Agency statistics, BIBB calculations.

People whose destination is unknown

The number of applicants recorded in the Federal Employment Agency's statistics who were no longer seeking help in their search for training, for whom no placement efforts were ongoing and for whom no information was available about their subsequent destination after applying for a training place ("other former applicants whose destination is unknown", see **Chart 15**) was again comparatively high at 76,701.

The possibility that some of these young people are at risk of dropping out of the education and training system "almost unnoticed" – with the well-known negative consequences for their employability and opportunities to participate fully in society – cannot be ruled out. Compared to the previous year, the number of "other former applicants whose destination

is unknown" fell by 7,658 or 9.1%, but as a proportion of all registered applicants, at 17.7%, this figure did not decline significantly (2020: 17.8%).¹¹⁸

Since the 2016 reporting year, the Federal Employment Agency's statistics have included information on the unemployment of applicants whose postapplication destination is unknown. ¹¹⁹ 20,383 of the applicants for whom no further training placement efforts were ongoing and whose destination was unknown were registered as unemployed on 30 September 2021, a significant fall compared to the previous year (2020: 24,847). They accounted for a lower proportion, at 26.6%, of all 76,701 "other former applicants whose destination is unknown" than in the previous year (2020: 29.5%). However, this is still well above the pre-pandemic level (2019: 23.3%).

¹¹⁸ Since 2009, the proportion has developed as follows: 2009: 18.3 %; 2010: 17.3 %; 2011: 15.9 %; 2012: 16.1 %; 2013: 17.0 %; 2014: 17.5 %; 2015: 17.1 %; 2016: 17.1 %; 2017: 17.2 %; 2018: 16.6 %; 2019: 16.9 %; 2020: 17.8 %; 2021: 17.7 %.

¹¹⁹ Information on unemployment rates among applicants whose subsequent destination is unknown is obtained from the labour market statistics on the reference date for applicant statistics (see Federal Employment Agency statistics, vocational training places and applicants, September 2017).

The BA/BIBB surveys of applicants also provide information on people whose post-application destination is recorded as unknown in the Federal Employment Agency (BA) statistics. 120 They found that the proportion of applicants outside the education and training system was much higher among people whose destination is unknown. Earlier Reports on Vocational Education and Training have noted that this group includes higher proportions of people whose highest school-leaving qualification is a secondary general school certificate and people from a migrant background than the group of people whose post-application destination is known. The proportion of previously unsuccessful training applicants is also conspicuously high among people whose destination is unknown, indicating that these young people are repeatedly not managing to successfully transition into vocational training or to complete training.

Destination of registered applicants from a forced migration background

Unlike many other statistics, the Federal Employment Agency's statistics have recorded figures on people from a forced migration background since 2016. 121

The total number of registered training place applicants from a forced migration background fell by 2,103 (-6.3%) to 31,081 compared to the previous year. ¹²² By comparison with 2019, the fall was 7,032 (-18.5%).

10,223 (or 32.9%) of the 31,081 applicants from a forced migration background were placed in vocational training. The percentage of these applicants who were placed in training was thus higher than in the previous year (31.2%), but lower than in 2019 (35.2%).

14,801 (47.6%) people in this applicant group were "other former applicants". 7,497 (24.1%) of them were in an alternative and no longer required further

placement efforts. The post-application destination of another 7,304 former applicants in this group (23.5%) was unknown. For a total of 25,024 (80.5%) applicants from a forced migration background, placement efforts had ended at the end of the reporting year (2019: 81.6%; 2020: 79.3%).

Placement efforts were continuing for 6,057 (19.5%) applicants from a forced migration background, including 3,443 (11.1%) who were in an alternative but still wanted to be placed in vocational training, and 2,614 (8.4%) unplaced applicants. At 19.5%, the percentage of applicants from a forced migration background still looking for a training place at the end of the reporting year was somewhat lower than in 2020 (20.7%), but higher than in 2019 (18.4%).

Findings from the 2018 BA/BIBB forced migration study showed that contact with companies (e.g. in the context of introductory training, internships, or a work trial) is decisive in helping young people succeed in transitioning into company-based vocational training. Refugees also benefit from individual support from mentors and sponsors¹²³ and networks funded by the European Social Fund.¹²⁴ It is likely that restrictions imposed to contain the coronavirus pandemic have also had a negative impact on the integration of refugees into vocational training. Many of the occupations that refugees most often choose to train in were also especially impacted by the pandemic (e.g. hairdressing).

The feature chapter of the Data Report accompanying the Report on Vocational Education and Training 2022, on "Skilled immigration and securing the supply of skilled labour: tapping into the potential", provides a comprehensive overview of key developments in the field of immigration for the purpose of employment in the past ten years, and it examines

¹²⁰ See Chapter 1 and the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 8.1.2.

¹²¹ People from a forced migration background are defined as third-country nationals living in Germany who have permission to remain pending an asylum decision (Aufenthaltsgestattung), who have a temporary residence permit (Aufenthaltserlaubnis), or whose deportation has been temporarily suspended (Duldung). The Federal Employment Agency statistics also record foreign nationals by nationality. Here too, only people who have been assessed as mature enough to start training are defined as having applicant status.

¹²² By way of comparison: 2016: 10,253; 2017: 26,428; 2018: 38,299; 2019: 38.113.

¹²³ Having a school-leaving qualification that was gained or is recognised in Germany also has a positive impact on a young person's prospects of being placed in training. See the Data Report accompanying the Report on Vocational Education and Training 2020, Chapter A 8.1.

¹²⁴ By providing comprehensive counselling for both refugees interested in training and employers, the IvAF (Integration of asylum seekers and refugees) networks, part of the Federal ESF Integration Directive (period: 2015 until the end of September 2022) (esf.de/portal/EN/Funding-period-2014-2020/ESF-Programmes/bmas/ESF-integration-directive.html), are helping to sustainably integrate the target group into training.

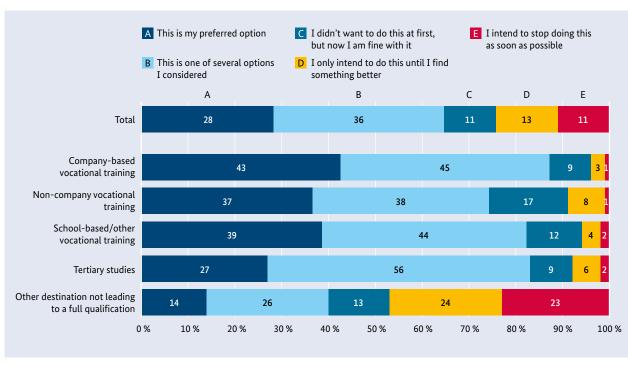


Chart 17: Opinion of current activity

Source: Special analysis of the 2020 BA/BIBB survey of applicants.

current challenges.¹²⁵ The Data Report accompanying the Report on Vocational Education and Training 2022 also contains an overview of current developments in the field of the recognition of foreign professional qualifications, especially as regards application numbers and outcomes.¹²⁶ People who obtained their professional qualification abroad need to have it recognised so that they can work in a regulated occupation in Germany, or they may require recognition for immigration purposes; in other cases, the recognition process enables them to improve their prospects in the German labour market, and it helps companies to better understand their foreign professional qualification.

Special analysis of the BA/BIBB survey of applicants in 2020

The surveys of applicants produced by the Federal Employment Agency (BA) and the Federal Institute for Vocational Education and Training (BIBB) also allow statements to be made about applicants' opinion of

their own subsequent destination (see **Chart 17**) and whether they are still interested in beginning dual training.

As descriptive analyses undertaken by the BIBB for the present Report on Vocational Education and Training show, placement in company-based vocational training was, as expected, the option most frequently considered a positive experience, at 88 % in total. For 43 % of respondents, it was their preferred option. For a further 45 %, it was one of several options they had considered.

Those applicants who were not placed in training leading to a full qualification naturally had a wider range of views. 23% of them said that they wanted to leave their current activity as quickly as possible, while a further 24% wanted to do so if they found something better. 14% said that their current activity was their preferred option, while 26% reported that it was one of several options they had considered.

¹²⁵ See the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter C.

¹²⁶ See the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter D 4.

When respondents were asked why they were not currently undertaking vocational training, the most common answer, at 33 %, was "I would like to undertake vocational training but have not yet found a training place". 11% of respondents stated that they no longer wanted to undertake vocational training because they had chosen another option. 10% believed that their schooling background had not been sufficient for them to receive a training place.¹²⁷

Of the respondents who had not been placed in dual vocational training, 20% said that they wanted to begin vocational training immediately. 36% wanted to begin vocational training, but only in the following year. The men surveyed (22%) were somewhat more likely than women (18%) to want to begin vocational training immediately. There was no gender difference in the proportion of respondents who were planning to start vocational training in the following year (36% for both men and women).

As a result of the coronavirus pandemic and the measures taken to contain it, young people who were looking for a company-based training place in 2020 faced particular challenges, as many career orientation services were limited or did not take place at all. Nonetheless, 83 % of applicants reported that, despite the coronavirus pandemic, they received all of the information that was important to them about seeking a vocational training place. However, people from a migrant or forced migration background, older applicants, previously unsuccessful applicants, and applicants with lower-level school-leaving certificates were somewhat less likely to agree with that statement 129 – a sign that these groups need greater support.

2.4.3 Subsequent placement

The placement activities of employment agencies and jobcentres do not end on 30 September, but they continue in a "fifth quarter" (known as the "subsequent placement" phase).¹³⁰

Subsequent placement is designed for people who, between 1 October and 31 December, still want to start training in the current training year. This means that not only former applicants but also young people who were not previously registered as applicants with employment agencies and jobcentres can be interested in subsequent placement.

For the end of 2021, the Federal Employment Agency's statistics recorded 79,063 vocational training places that were still supposed to be filled in 2021, 4,465 (+6.0%) more places than in the previous year. The figure is made up of the 63,176 unfilled vocational training places that were already registered on the reference date of 30 September, 131 and another 15,887 training places that were not registered with advisory and placement services until after that date. 132

77,272 (97.7%) of these registered training places were company-based, and 13,875 of them were unfilled at the end of the "fifth quarter", equivalent to 17.6% of all registered training places for training commencing by the end of 2021 (previous year: 16.1%).

There were 79,063 training places to be filled and 67,060 applicants for whom placement efforts were continuing until the end of 2021. 42,536 (63.4%) of the applicants were male, and 24,517 (36.6%) were female. Compared to the previous year, the number of applicants fell by 9,500 (–12.4%). This is also linked to the decline in the total number of applicants.¹³³

¹²⁷ The answers mentioned here are only some of the possible responses, and respondents could select more than one option.

¹²⁸ It must be kept in mind that the survey took place from November 2020 to January 2021. The training year had thus started some time ago.

¹²⁹ See Christ, Alexander; Eberhard, Verena; Heinecke, Marcel; Neuber-Pohl, Caroline; Schuß, Eric (2021): Ausbildungsstellensuche in Zeiten der Corona-Pandemie. Belastungen, Einschränkungen und Mehraufwand im Bewerbungsprozess? Deskriptive Analysen auf Basis der BA/BIBB-Bewerberbefragung 2020 (Seeking a training place during the coronavirus pandemic. Pressures, restrictions, and additional burdens in the application process? Descriptive analyses based on the 2020 BA/BIBB survey of applicants). Version 1.0, Bonn (lit.bibb.de/vufind/Record/DS-779063). For further analyses based on data from the 2020 BA/BIBB survey of applicants, see: bibb.de/de/138855.php.

¹³⁰ There are many reasons for this (e.g. a hitherto unsuccessful search for a training place, or a desire to change to a different training place after already starting vocational training).

¹³¹ See Chapter 2.4.1.

¹³² These may, for example, be training places where the contract was prematurely terminated during the probationary period and that therefore need to be filled quickly.

¹³³ See Chapter 2.1.2 and Federal Employment Agency (Bundesagentur für Arbeit) statistics: Berichte: Arbeitsmarkt kompakt – Nachvermittlung am Ausbildungsmarkt (Reports: Labour market in brief – Subsequent placement in the vocational training market), Nuremberg, February 2022 (statistik.arbeitsagentur.de/DE/Statischer-Content/Statistiken/Fachstatistiken/Ausbildungsmarkt/Generische-Publikationen/AM-kompakt-Bilanz-Nachvermittlung.pdf).

Table 16: Registered training places and applicants who wanted to start training by the end of 2021

		Of which:	-	Desistand	Pagistared	
Land	Registered vocational training places	vocational registered as		Registered training places per 100 registered applicants	Registered applicants per 100 registered training places	
Baden-Württemberg	11,642	10,174	4,869	239.1	41.8	
Bavaria	17,882	15,609	6,086	293.8	34.0	
Berlin	2,134	1,112	6,142	34.7	287.8	
Brandenburg	2,521	2,081	2,368	106.5	93.9	
Bremen	538	374	1,085	49.6	201.7	
Hamburg	605	275	1,391	43.5	229.9	
Hesse	3,978	3,033	6,112	65.1	153.6	
Mecklenburg-Western Pomerania	2,037	1,641	669	304.5	32.8	
Lower Saxony	6,426	4,841	6,999	91.8	108.9	
North Rhine-Westphalia	15,916	11,440	21,124	75.3	132.7	
Rhineland-Palatinate	3,998	3,334	3,141	127.3	78.6	
Saarland	1,015	814	668	151.9	65.8	
Saxony	3,354	2,695	1,764	190.1	52.6	
Saxony-Anhalt	1,877	1,510	724	259.3	38.6	
Schleswig-Holstein	2,814	2,310	2,985	94.3	106.1	
Thuringia	2,305	1,917	700	329.3	30.4	
Western Germany	64,814	52,204	54,460	119.0	84.0	
Eastern Germany	14,228	10,956	12,367	115.0	86.9	
Germany	79,063	63,176	67,060	117.9	84.8	

Source: Federal Employment Agency statistics, BIBB calculations.

49,527 of the 67,060 registered applicants were already applicants in the 2020/2021 reporting year. 17,533 were new applicants who had registered with an employment agency or jobcentre after 30 September and wanted to be placed in vocational training at short notice.

Unlike the previous year, 2021 saw a return to there being more vocational training places than applicants registered for the "fifth quarter" in total, with 117.9 training places for every 100 applicants (previous year: 97.4; the year before: 104.0). The figures varied significantly in different regions (see **Table 16**). 134
Subsequent placement efforts resulted in a total of 6,177 (9.2%) of the 67,060 remaining applicants being

placed in training. 27,097 (40.4%) remained unplaced, and so placement efforts were continuing for them and for the 21,027 (31.4%) applicants with an alternative. The other 12,759 (19.0%) applicants had another post-application destination and had ended their request for placement for a range of different reasons. The destination of 7,226 of them was unknown.¹³⁵

Taking just the two groups of applicants who were already still looking for a training place on the reference date of 30 September (unplaced applicants and applicants with an alternative on 30 September) into account, the results are as follows.

¹³⁴ See also the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 1.1.

¹³⁵ The figures differentiated by gender were as follows: 5.3% of men and 3.9% of women were placed in training. 12.2% of the men and 6.8% of the women were from the group of other former applicants, and 20.0% of the men and 11.3% of the women had an alternative on 30 September but still wanted to be placed in training. 25.8% of the men and 14.6% of the women were unplaced.

Subsequent placement further reduced the number of unplaced applicants. At the start of subsequent placement, 24,576¹³⁶ applicants were unplaced (100%), and by January 2022 this figure decreased to 13,757 (56.0%). 1,871 (7.6%) were placed in vocational training, while 2,612 (10.6%) had an alternative but still wanted to be placed in training. 6,336 (25.8%) had an alternative or their post-application destination was unknown, and they had ended training placement efforts.

Of the 11,491 applicants who had an alternative on 30 September but still wanted to be placed in training (100%), 716 (6.2%) were placed in training. Training placement efforts had ended for another 1,818 (15.8%) former applicants. 8,059 (70.1%) were in an alternative to training but still wanted a training place, while 898 (7.8%) were unplaced and also still wanted to be placed in training.

Older applicants and/or those who had unsuccessfully sought a training place in previous years ran the greatest risk of remaining unplaced.¹³⁷

It should be noted that placing trainees in vocational training several weeks or months after the new training year has started is a major challenge. Companies offering training places generally focus on the start of the training year, so the training places available for subsequent placement are mainly those that could not be filled over the course of the reporting year or those that have become vacant as a result of premature training contract termination.¹³⁸

2.4.4 Young people in part-time training

In 2005, the option of completing dual vocational training part-time was legally enshrined in the Vocational Training Act (Berufsbildungsgesetz). Part-time vocational training enables young parents, in particular, to flexibly adapt training times to fit in with their lives. In 2020, 56.5 % of all young mothers (around 76,000) and 39.5 %¹³⁹ of all young fathers (around 15,900) aged between 16 and 24 had no vocational qualifications and were not attending school or in vocational training or tertiary studies.¹⁴⁰

To date, however, there has been little uptake of the option to complete dual vocational training part-time. According to data from the vocational training statistics of the federal and Länder statistical offices (vocational training statistics on 31 December), there were just 2,016 new training contracts for part-time training in 2020, 0.4% of all new training contracts in that training year. The proportion of vocational training undertaken part-time thus remained stable compared to the previous year (2019: 2,283 new contracts for part-time training, also 0.4%). As in previous years, more female trainees (1.0%) were training part-time in 2020 than male trainees (0.1%).

Recent amendments to the Vocational Training Act and the Crafts Code (Handwerksordnung) which entered into force on 1 January 2020 have made the conditions for part-time vocational training far more flexible. Part-time training previously involved reduced weekly working hours without extending the overall duration of the training, so this model was mainly chosen by high achievers. In future, it will be possible to extend the overall duration of part-time vocational training in inverse proportion to the reduction in working hours. This will make the model available to around 115,400 trainees who, for other reasons, have limited time available for training. A recent BIBB publication comprehensively examines the effects of the recent legal amendments from 2020,

¹³⁶ It should be noted that only those applicants from that reporting year who still wanted to be placed in training after 30 September are counted here, so the figures on unplaced applicants and applicants with an alternative on 30 September differ from the figures presented in Chapter 2.4.1 for the reference date of 30 September. As the training year is well under way at that point, fewer people will be looking for a training place for the current year in the months from October to December. It can be assumed, however, that the majority of these people will again register as applicants in the course of the new reporting year.

¹³⁷ See also the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 1.1.

¹³⁸ For details on occupations with high numbers of unfilled training places relative to all training places offered by companies, see Chapter 2.4.1. For more information on the termination of training contracts, see Chapter 2.4.6.

¹³⁹ Regarding the information on young fathers in the 2020 microcensus, it must be kept in mind that the informational value is limited, according to the Federal Statistical Office, as the figure is relatively non-robust from a statistical perspective.

¹⁴⁰ See Federal Statistical Office 2021, special analysis of the 2020 microcensus.

the structures and trends in part-time dual vocational training, and the trajectories of trainees in this form of training. ¹⁴¹

2.4.5 Integrating young people from a migrant background into training

Improving training opportunities and participation for young people from a migrant background remains a key challenge.

26.7% of the people living in Germany in 2020 were from a migrant background, as defined for statistical purposes, ¹⁴² according to calculations based on the microcensus, ¹⁴³ and this figure rose by 0.7 percentage points over the preceding year's figure ¹⁴⁴ (2019: 26.0%).

- 141 See Uhly, Alexandra (2020): Duale Berufsausbildung in Teilzeit: Empirische Befunde zu Strukturen und Entwicklungen der Teilzeitberufsausbildung (BBiG/HwO) sowie zu Ausbildungsverläufen auf Basis der Berufsbildungsstatistik (Part-time dual vocational training: empirical findings on structures and trends in part-time vocational training (under the Vocational Training Act/Crafts Code) and on training trajectories on the basis of the vocational training statistics). BIBB preprint, Version 1.0, Bonn, 2020 (https://res.bibb. de/vet-repository_777102).
- 142 The Federal Statistical Office defines the characteristic of migrant background for the purposes of the microcensus as follows: "A person is from a migrant background if they or at least one parent did not acquire German citizenship by birth. The definition includes the following persons: 1. Immigrants and foreign nationals who were born in Germany, 2. Immigrants and foreign nationals born in Germany who have become naturalised citizens. 3. Ethnic German resettlers from eastern Europe, 4. Persons who have gained German citizenship via adoption by a German parent, 5. Children born with German citizenship whose parents fall into one of these four groups" (Federal Statistical Office 2022, Bevölkerung mit Migrationshintergrund – Ergebnisse des Mikrozensus 2020 (Endergebnisse) (Population from a migrant background - results of the 2020 microcensus (final results)). The broader definition of migrant background, which since the 2017 reporting year has been recorded annually in the microcensus, is used in the following section. Results based on this definition were previously available only every four years (2005, 2009, 2013), so earlier Reports on Vocational Education and Training reported the results based on migrant background only in the narrow sense. For more detailed information on the various definitions of terms and methodological updates, see Federal Statistical Office 2021, Bevölkerung mit Migrationshintergrund - Ergebnisse des Mikrozensus 2020 (Endergebnisse)) (destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/ Migration-Integration/Publikationen/Downloads-Migration/ migrationshintergrund-endergebnisse-2010220207004.pdf).
- 143 A change in the microcensus survey methodology means that from 2017, the results on migration status can only be provided based on the population in private households. The results thus do not include people living in collective accommodation (e.g. reception centres for refugees) (see Federal Statistical Office 2022, Bevölkerung mit Migrationshintergrund – Ergebnisse des Mikrozensus 2020 (Endergebnisse)).
- 144 It must be kept in mind that the microcensus methodology was revised in 2020, and so the results from the 2020 reporting year onward are only comparable to a limited extent with those of previous years. There were also limitations in 2020 due to the coronavirus pandemic; among other things, in-person surveys were all but impossible, and the

The proportion of younger people aged between 15 and 19 from a migrant background was 35.5% in 2020 (2019: 34.6%).

According to the 2020 microcensus data, around 38% of people from a migrant background, as defined for statistical purposes, were born in Germany, while the others had immigrated. Somewhat more than half of people from a migrant background, as defined for statistical purposes, had German citizenship in 2020. In total, 12.6% of the German population were foreign nationals in the 2020 reporting year, with a percentage of 10.8% for 15- to under-20-year-olds. Not all statistics record migrant background as a characteristic, so some parts of the following section refer simply to young people who are not German nationals.

The school-leaving qualifications of young foreign nationals were generally lower than those of young German nationals in the 2020 reporting year. ¹⁴⁵ In addition, young foreign nationals were much more likely to leave general schools without a secondary general school certificate than young German nationals. ¹⁴⁶

According to data from the vocational training statistics of the federal and Länder statistical offices, the percentage of young foreign nationals starting vocational training in the 2020 reporting year, at 35.4%, was well below the figure of 51.4% for young German nationals (2019: 38.4% vs. 56.3%).¹⁴⁷ The rate of new

- response rate was significantly lower than in earlier years. According to the Federal Statistical Office, the quality of the annual results from the 2020 microcensus has generally been ensured at federal level despite these difficulties. For more detailed information, see Federal Statistical Office 2021, Bevölkerung mit Migrationshintergrund Ergebnisse des Mikrozensus 2020 (Endergebnisse).
- 145 2020: Secondary general school certificate: 31.1% of young foreign nationals vs. 14.9% of young German nationals; intermediate school-leaving certificate: 40.2% of young foreign nationals vs. 44.8% of young German nationals; higher education entrance qualification: 14.0% of young foreign nationals vs. 35.1% of young German nationals (see Federal Statistical Office 2020, general schools, subject-matter series 11, series 1, 2020/2021 school year). In this context, it must be noted that there is a connection between a student's school-leaving qualification and the socio-economic status of their parents.
- 146 2011: 11.8 % vs. 5.0%; 2012: 11.4 % vs. 4.9%; 2013: 10.9 % vs. 4.6 %; 2014: 11.9 % vs. 4.9 %; 2015: 11.8 % vs. 5.0 %; 2016: 14.2 % vs. 4.9 %; 2017: 18.1 % vs. 5.2 %; 2018: 18.2 % vs. 5.4 %; 2019: 17.6 % vs. 5.5 %; 2020: 14.7 % vs. 5.1 % (see Federal Statistical Office, general schools, subject-matter series 11, series 1, 2011/2012 to 2020/2021 school years).
- 147 Here the proportion of German and foreign nationals entering training is calculated separately for the corresponding resident population. The rate of new trainees relative to the resident population is

Table 17: Rates at which young German and foreign nationals started training

	New entries into training in %									
Year	Total		German nationals		Foreign nationals					
		Total	Women	Men	Total	Women	Men			
2011	58.0	60.3	49.6	70.5	35.4	31.8	38.8			
2012	56.5	59.0	48.6	68.9	33.7	30.9	36.3			
2013	54.3	56.9	46.8	66.5	31.7	28.1	35.1			
2014	53.4	56.3	46.0	66.0	31.1	28.8	33.2			
2015	52.4	56.7	46.1	66.8	26.0	26.2	25.8			
2016	51.7	55.8	44.9	66.2	27.6	26.3	28.7			
2017	52.9	55.7	43.6	67.1	34.2	26.9	39.3			
2018	54.5	56.5	43.5	68.8	38.7	28.2	46.2			
2019	54.4	56.3	42.7	69.3	38.4	29.4	45.1			
2020	49.8	51.4	38.1	64.1	35.4	30.7	39.1			

Source: BIBB "Database of trainees", based on data from the vocational training statistics of the federal and Länder statistical offices (data as at 31 December), BIBB calculations.

entrants in vocational training among young men who were not German nationals was 39.1% in 2020 (young men who were German nationals: 64.1%), while 30.7% of young women who were not German nationals started training in the same year (young women who were German nationals: 38.1%; see **Table 17**).

The percentage of young foreign nationals starting training, especially young men, rose significantly in the 2017 and 2018 reporting years. This was attributable in particular to the increase in refugees being placed in dual vocational training.¹⁴⁸ While 2019 initially saw a

slight decline in the rates of young foreign nationals starting vocational training, the percentage fell sharply in 2020 compared to the previous year (–3.0 percentage points). This substantial fall is mainly a result of the coronavirus pandemic and the restrictions introduced to contain it, the impact of which can also be seen in the rate of young German nationals starting vocational training (–4.9 percentage points). While the proportion of young men who were not German nationals starting training underwent a steep decline (–6.0 percentage points) in 2020, the first year of the coronavirus pandemic, the rate for young women who were not German nationals rose slightly compared to the previous year (+1.3 percentage points).¹⁴⁹

According to data from the vocational training statistics, in 2020 the average age of young people starting training who were not German nationals (22.3) was much higher than the average age of young German nationals starting training (19.3), which may be mainly due to the longer and more difficult transitions into training experienced by young people who are not German nationals or who are from a migrant background.

For many years, empirical surveys on the transition from school to vocational training (e.g. BIBB transition studies and BA/BIBB surveys of applicants) have

calculated for each age cohort, and these rates are then added to produce the proportion of people starting training. For more details, see the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 5.8.

¹⁴⁸ For more information on this, see the Report on Vocational Education and Training 2020, Chapter 2.4.5, as well as Kroll, Stephan and Uhly, Alexandra (2018): Ausländische Auszubildende in der dualen Berufsausbildung: Einmündung und Ausbildungserfolg. Eine Analyse der Berufsbildungsstatistik mit besonderer Betrachtung der Staatsangehörigkeiten der zugangsstärksten Asylherkunftsländer (Foreign national trainees in dual vocational training: placement and training success. An analysis of the vocational training statistics, focusing on the nationalities of the main countries of origin for asylum seekers) (bibb.de/dokumente/pdf/dazubi analyse auslaendischeazubis_asylherkunftslaender_2008-2017.pdf), and Uhly, Alexandra (2019): Ausländische Auszubildende in der dualen Berufsausbildung – nach einzelnen Nationalitäten, Deutschland 2008 bis 2020. Ergebnisse auf Basis der Berufsbildungsstatistik (Datensystem Auszubildende [DAZUBI] Zusatztabellen) (Foreign national trainees in dual vocational training - by individual nationalities, Germany, 2008 to 2020. Results based on the vocational training statistics. Trainee Data System (DAZUBI), additional tables) (bibb.de/ dokumente/xls/dazubi_zusatztabellen_auslaendische-azubis_ einzelne-nationalitaeten_2008-2020.xlsx).

¹⁴⁹ See the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 5.8.

shown that young people from a migrant background have worse prospects. However, the reason for this is not solely their often lower-level school-leaving qualifications. Even if they have the same school-leaving qualifications and even if many other contributing factors are taken into account, young people from a migrant background still experience disadvantages in accessing vocational training. The results also show that there are major differences depending on region of origin. It is, for example, much harder for young people of Turkish or Arab origins to find a training place. 150

The longer ago that their family migrated, the better the prospects are of young people from a migrant background being placed in training in a company. Young third-generation migrants¹⁵¹ who leave a general school after year 9 or 10 and look for vocational training right away are just as successful in finding training places as young people who are not from a migrant background, as defined for statistical purposes. On the whole, however, young people from a migrant background, as defined for statistical purposes, are more rarely interested in starting vocational training as soon as they leave school. This is also true of third-generation migrants, if to a far lesser extent.¹⁵²

For many young people from a migrant background, as defined for statistical purposes, the language-related requirements of vocational training are a particular

150 See Beicht, Ursula (2017): Ausbildungschancen von Ausbildungsstellenbewerbern und -bewerberinnen mit Migrationshintergrund. Aktuelle Situation 2016 und Entwicklung seit 2004 (Training opportunities of applicants from a migrant background. Current situation in 2016 and trends since 2004) (bibb.de/veroeffentlichungen/de/publication/show/8331). For details on the results for 2018, see the Data Report accompanying the Vocational Education and Training Report 2019, Chapter A 8.1, and Eberhard, Verena; Schuß, Eric (2021): Chancen auf eine betriebliche Ausbildungsstelle von Geflüchteten und Personen mit und ohne Migrationshintergrund (Chances of a company-based vocational training place for refugees and people with and without a migrant background). Version 1.0, Bonn, 2021 (lit.bibb.de/vufind/Record/DS-185809).

- 151 "Third-generation migrants" are people born in Germany whose parents were also born in Germany and whose grandparents immigrated.
- 152 See Beicht, Ursula; Walden, Günter (2018): Übergang nicht studienberechtigter Schulabgängerinnen/Schulabgänger mit Migrationshintergrund in vollqualifizierende Ausbildung. Analysen auf Basis des Nationalen Bildungspanels unter besonderer Berücksichtigung von Zuwanderungsgeneration und Schulabschlussniveau (Transition of school leavers from a migrant background without a higher education entrance qualification to vocational training leading to a full qualification. Analyses based on the National Educational Panel Study, focusing on migrant generation and level of school-leaving qualifications). BIBB Report 6/2018 (bibb.de/veroeffentlichungen/de/publication/show/9391).

challenge. To improve these young people's prospects of being placed in training through language tuition, a wide range of free vocational German language courses have been made available across Germany. People seeking training and trainees undergoing dual vocational training in a company can take part in vocational German language courses enabling them to gain B2- or C1-level German language certificates under the Common European Framework of Reference for Languages that will better prepare them for training and support them during training.

The Federal Office for Migration and Refugees (Bundesamt für Migration und Flüchtlinge) is also trialling German language courses for trainees that are more closely oriented towards the demands and content of dual vocational training and the needs of companies providing training, with the goal of giving trainees from a migrant background, as defined for statistical purposes, the best possible language support to enable them to successfully complete training.

2.4.6 Premature training contract termination

According to the vocational training statistics, a total of 137,784 training contracts were terminated prematurely nationwide in 2020, and so the premature contract termination rate in dual vocational training was 25.1%¹⁵³, a fall of 1.8 percentage points compared to the previous year (2019: 26.9%).¹⁵⁴ There is therefore

- 153 The contract termination rate is the proportion of prematurely terminated training contracts relative to all new training contracts. Since it cannot be known in the current reporting year how many trainees with newly concluded training contracts will go on to prematurely terminate their contracts, a "layer model" is used to calculate the training contract termination rate, approximately determining the contract termination rate of the current cohort of trainees. With the conversion of the vocational training statistics of the federal and Länder statistical offices to individual data collection (see the Report on Vocational Education and Training 2010, p. 31). the training contract termination rate can now be more precisely calculated because the month and year of key training-relevant events are now recorded. Contract terminations can thus be differentiated by the year in which the contract began and expressed as a percentage of all newly concluded training contracts with a similar start date (see www2.bibb.de/bibbtools/dokumente/pdf/a21 dazubi daten.pdf). Another new feature is that data sets can be compiled for each cohort, making it possible to analyse training trajectories until the training contract ends. Based on these data sets for each cohort, the proportion of prematurely terminated training contracts can be calculated expost without the need to resort to the relatively complex "layer model" calculation formula. The results show that the BIBB's formula for calculating the premature training contract termination rate based on the layer model provides a very good approximate figure.
- 154 Since 2010, the premature training contract termination rate has developed as follows: 2010: 23.0%; 2011: 24.4%; 2012: 24.4%;

no indication that those young people who were able to conclude a training contract and take up a training place in 2020, despite the difficult conditions caused by the coronavirus pandemic, were at a higher risk of premature training contract termination. Breakdowns based on data from the vocational training statistics also show that, compared to the previous year, the premature contract termination rate declined in 2020 in all of the Länder, in most sectors of the training system, and in the majority of training occupations. 155 Comprehensive analyses of premature training contract terminations and of training trajectories during the pandemic, based on data from the vocational training statistics in 2020, the first year of the coronavirus crisis, can be found in a recent BIBB publication.156

Analyses carried out by the BIBB have demonstrated a connection between developments in the premature training contract termination rate and the training market situation. In years where the training market supply and demand ratio (ANR) is more favourable from the perspective of trainees, the premature contract termination rate tends to be higher than in years when the supply and demand ratio is lower and less favourable. One reason for this could be that young people may be more inclined to terminate a training contract and change their training when they have more training places available to choose from. 157 The significant fall in the premature training contract termination rate in 2020, the first year of the coronavirus pandemic, compared to the previous year is unexpected given that the supply and demand ratio remained constant over this period (expanded ANR in 2019 and 2020: 96.6). One possible explanation for this could be that young people who found a training place during the uncertain times of the pandemic believe that they have fewer opportunities to change to a different (preferred) training place. In addition, the

2013: 25.0 %; 2014: 24.6 %; 2015: 24.9 %; 2016: 25.8 %; 2017: 25.7 %; 2018: 26.5 %; 2019: 26.9 %.

pandemic-related restrictions could have led trainees to choose to hold on to their training place, even in the face of negative aspects such as conflicts or dissatisfaction. Furthermore, the efforts made by the various stakeholders in the dual system (including companies, chambers, associations, trade unions, and policymakers) to maintain as many training relationships as possible during the coronavirus crisis are also likely to have played a role. ¹⁵⁸

In principle, the vocational training statistics only provide data on the scale of premature training contract terminations, but they do not record the reasons for the termination or what young people go on to do next. However, various studies have surveyed trainees and the companies providing training on the causes of premature training contract terminations, and they give reasons such as conflict with training personnel and managers, low-quality training, unfavourable working conditions, personal and health reasons, and inaccurate impressions of the occupation. Companies' reasons were mainly the trainees' inadequate performance, lack of motivation or failure to integrate into the company, and inaccurate impressions of the occupation. Training contracts can also be terminated early because a trainee changes occupation or moves from non-company to company-based training, or due to the insolvency and closure of the company. In other words, not all terminations can be equated with dropping out of vocational training.159

A BIBB analysis based on the National Educational Panel Study (NEPS) can provide insight into what people go on to do after the premature termination of a training contract. ¹⁶⁰ The NEPS makes it possible to track people's education and training trajectories, and this makes the NEPS analysis an important complement to the data provided by the official

¹⁵⁵ See also the Data Report accompanying the Report on Vocational Education and Training 2021, Chapter A 4.7.

¹⁵⁶ See Uhly, Alexandra (2021): Ausbildungsverlauf unter Pandemiebedingungen – Vorzeitige Vertragslösungen und Abschlussprüfungen in der dualen Berufsausbildung im Jahr 2020. Deskriptive Analysen auf Basis der Berufsbildungsstatistik (Training trajectories during the pandemic – premature contract termination and final examinations in dual vocational training in 2020. Descriptive analyses based on the vocational training statistics). BIBB Discussion Paper, Bonn (https://res.bibb.de/vet-repository_779603).

¹⁵⁷ See the Data Report accompanying the Report on Vocational Education and Training 2014, Chapter A 4.7.

¹⁵⁸ For more details, see also Uhly, Alexandra (2021): Ausbildungsverlauf unter Pandemiebedingungen – Vorzeitige Vertragslösungen und Abschlussprüfungen in der dualen Berufsausbildung im Jahr 2020. Deskriptive Analysen auf Basis der Berufsbildungsstatistik. BIBB Discussion Paper, Bonn (https://res.bibb.de/vet-repository_779603).

¹⁵⁹ See the 2021 Data Report, Chapter A 5.6. It should be noted, by way of comparison, that the dropout rate for students at higher education institutions, which records the proportion of first-year students who do not complete any tertiary studies course, has been calculated by the German Centre for Higher Education Research and Science Studies to be 27 % for German students in bachelor's degree courses in the 2018 graduate cohort.

¹⁶⁰ See doi:10.5157/NEPS:SC4:10.0.0.

statistics. According to analyses carried out by the BIBB, around 64% of those surveyed again began a form of training leading to a full qualification after the premature termination of a training contract, and roughly one in five made a seamless transition into a new training relationship. Around half of those surveyed began dual vocational training again, and around 14% began another form of education or training, such as school-based training or tertiary studies. ¹⁶¹ It should be noted, however, that these findings reflect the pre-pandemic situation.

The vocational training statistics reveal clear differences in the premature training contract termination rates in the various training occupations. Looking at the 20 occupations with the highest and lowest rates of premature training contract termination, the termination rates ranged between 5.0% and 45% in 2020. The rankings have changed little compared with the previous year.

The occupation with the highest premature contract termination rate in 2020 was that of hairdresser (44.8%). Rates of premature training contract termination were also disproportionately high in occupations in the hotel and hospitality industry: professional caterer (42.1%), restaurant specialist (42.0%), cook (41.3%) and specialist in the hotel business (37.1%). The following occupations also recorded relatively high rates of premature training contract termination of over 40%: building and object coater (44.1%), safety and security specialist (43.6%), driver (43.1%), salesperson specialising in foodstuffs (43.1%), beautician (41.9%), parquet layer (41.4%), industrial cleaner (41.0%) and scaffolder (40.0%).

The lowest rate of premature training contract termination in 2020 was in the occupation of clerk in public administration (4.6%). The following occupations also recorded very low rates of premature training contract termination of under 8%: biology laboratory technician (6.6%), forest manager (7.2%), road maintenance worker (7.3%), chemical laboratory technician (7.4%), labour market services specialist (7.8%),

chemical technician (7.8%), electronics technician for automation technology (7.8%) and social insurance clerk (7.9%).

The lower the level of the trainee's general school-leaving qualification, the higher the premature training contract termination rate (no secondary general school certificate: 35.3%, with a secondary general school certificate: 35.7%, with an intermediate school-leaving certificate: 23.6%; with a higher education entrance qualification: 15.6%).

There were also differences in the rates for German trainees and foreign national trainees. On average, 33.2% of foreign national trainees' training contracts were terminated prematurely, while the figure for German trainees was just 24.0%. These differences in the premature training contract termination rates can, however, also be partly explained by disparities in the highest-level general school-leaving qualifications in each group.

In general, caution must be shown in interpreting data on this subject because the correlations are complex. For example, premature training contract termination rates may be higher for a specific group because they are more likely to be training in occupations, companies, or regions with higher termination rates. Conversely, contract termination rates may be higher in some occupations because more young people with a higher probability of premature training contract termination are training in those occupations.

Across the dual training system, the premature training contract termination rates of women (25.4%) and men (24.8%) were almost identical, ¹⁶³ although there are some clear differences in the figures in the various sectors. Women had a relatively high rate of premature training contract termination compared with men in training occupations in the skilled trades (women: 35.4%; men: 31.1%), housekeeping (women: 28.3%; men: 24.6%) and agriculture sectors (women: 26.7%; men: 22.9%). Women had lower premature training contract termination rates compared with men in training occupations in the public service (women: 5.7%; men: 8.1%) and professional services (women: 29.4%; men: 30.5%) sectors. It is clear

¹⁶¹ A more detailed presentation of the findings of the BIBB's analyses based on National Educational Panel Study (NEPS) data can be found in the Report on Vocational Education and Training 2020, Chapter 2.4.7, and in the 2020 Data Report, Chapter A 8.3.

¹⁶² State-recognised occupations in the dual system in which at least 300 trainees began training are included in the calculations.

¹⁶³ For more detailed analyses, see the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 5.6.

that, with the exception of the housekeeping sector, women's premature training contract termination rates are higher than the rates for men in those sectors¹⁶⁴ where women make up a lower proportion of trainees. Men's premature training contract termination rates were also higher in occupational sectors where men represented a lower percentage of trainees.¹⁶⁵

The proportion of prematurely terminated training contracts and training that the trainee never started is highest among micro-enterprises and decreases in inverse proportion to company size, as an analysis carried out by the Institute for Employment Research (IAB) based on data from the 2019 IAB Establishment Panel has shown.¹⁶⁶

Not every premature training contract termination is problematic, but premature terminations result in uncertainties and a loss of time, energy, and other resources for both parties (companies and young people). In the worst case, premature training contract terminations may lead both young people and companies to stop participating in training entirely.

2.4.7 Success in vocational training examinations

Analyses carried out by the BIBB based on data from the vocational training statistics of the federal and Länder statistical offices show that 380,184 men and women passed their final training examinations in 2020, completing their training by gaining a formal vocational qualification. The pass rate for all final training exams held was 89.6% (2019: 90.5%).

If the reference value used in this analysis is not the 424,161 final training exams held (395,214 first-time exams, 28,947 repeat exams), but that of the

164 Average across all occupations in the sector.

411,999 people who sat final training exams, ¹⁶⁷ the pass rate is somewhat higher still, at 92.3% (2019: 92.8%).

The number of final exams sat was slightly higher (+0.2%) than in the previous year, while the number of people taking exams was slightly lower (-0.3%).

91.5% of people taking exams succeeded in gaining a formal vocational qualification on their first attempt. The pass rate for those who had previously failed the exam and were repeating it for the first time in 2020 was 65.5%, while the pass rate for those repeating the exam for the second time was 56.2% in 2020.

In 2020, a total of 31,812 people sitting exams failed them, although in the vast majority of cases this was not their final permitted attempt. People who do not pass the exam after their second repeat attempt cannot sit the exam again. In 2020, 1,962 people failed their exam for the last time, which is 0.5% of all people taking exams.

The proportion of exams that were repeat attempts was 6.8%, which is in line with the normal figure over the past ten years (6% to 7%).

The pass rate for men (91.4% of men sitting exams) was slightly lower than the pass rate for women (93.7% of women sitting exams), even though men reached this rate with a higher proportion of repeat examinations.

A recent BIBB analysis concludes that in 2020, despite the more difficult conditions caused by the coronavirus pandemic and the measures taken to contain it, final examinations were able to take place on the normal scale, and the pass rates were also similar to previous years.¹⁶⁸

¹⁶⁵ In the 2020 reporting year, the percentages of women relative to all trainees by training sector were as follows: skilled trades: 17.3%, agriculture: 23.5%, public service: 62.9%, housekeeping: 85.7%, professional services: 91.3% (percentage of all trainees: 34.8%; for more details, see the 2022 Data Report, Chapter A 5.2).

¹⁶⁶ See Leber, Ute; Schwengler, Barbara (2021): Betriebliche Ausbildung in Deutschland. Unbesetzte Ausbildungsplätze und vorzeitig gelöste Verträge erschweren Fachkräftesicherung (Company-based vocational training in Germany. Unfilled places and premature contract terminations make it difficult to meet the demand for skilled labour) (IAB-Kurzbericht, 3/2021), Nuremberg (iab.de/194/section.aspx/Publikation/K210211HR1).

¹⁶⁷ The number of people taking exams is a person-related parameter, in contrast to the number of exams sat, which is a case-related parameter. Every person who sat an exam during the reporting year is counted just once, regardless of how many exams they sat, so the number of people sitting exams is usually lower than the number of exams taken in a calendar year. For more information on the various figures and findings on examination pass rates, see the Data Report accompanying the Report on Vocational Education and Training 2021, Chapter A 5.7.

¹⁶⁸ For information about the long-term trend in final examinations since 1977 and an analysis of the number of final exams sat and indicators relating to success in exams, see Uhly, Alexandra (2021): Ausbildungsverlauf unter Pandemiebedingungen – Vorzeitige Vertragslösungen und Abschlussprüfungen in der dualen Berufsausbildung im Jahr 2020. Deskriptive Analysen auf Basis der Berufsbildungsstatistik (Training trajectories during the pandemic – premature

In the higher education sector, the Federal Statistical Office has recorded a reduction in the number of graduates. In the 2020 examination year (winter semester 2019/2020 and summer semester 2020), only around 477,000 graduates gained a degree at German higher education institutions, 6% fewer than in the previous year (508,000). With the exception of 2018 and 2020, the number of graduates had risen continuously since 2001. 169

2.5 The transition to employment

2.5.1 Companies' employment of their trainees

Statements on the transfer into employment of trainees who have successfully completed training can be made based on IAB Establishment Panel data. The rate of transfer into employment records the number of qualified trainees who were subsequently employed by the company they trained in. In 2020, the rate of transfer into employment was 72 %, which is lower than in the previous year (2019: 77 %). However, the rate is still much higher than in earlier years.¹⁷⁰

The larger the company, the more likely it is to subsequently employee its trainees (1 to 9 employees: 55%; 10 to 49 employees: 68%; 50 to 499 employees: 75%; 500 employees and above: 88%). With the exception of large companies with more than 500 employees, all company size classes saw a decline in the rate of transfer into employment in the first year of the pandemic. The sharpest fall was recorded for micro-enterprises (1 to 9 employees), with a reduction of 10 percentage points.¹⁷¹

contract termination and final examinations in dual vocational training in 2020. Descriptive analyses based on the vocational training statistics). BIBB Discussion Paper, Bonn (https://res.bibb.de/vet-repository_779603).

It should be noted that this does not include trainees employed by a company other than the one they trained in, or those who started tertiary studies or embarked on other vocational qualifications.

2.5.2 Young adults with no vocational qualifications

In 2020, according to data obtained from the microcensus, 15.5 % (extrapolated figure: 2.33 million)¹⁷² of young people aged between 20 and 34 in Germany had no vocational qualifications¹⁷³ (see **Table 18**), and thus were less well-positioned for qualified participation in working life in the long term.¹⁷⁴ This has considerable negative consequences for the young people concerned and for society as a whole. People without vocational qualifications have a higher risk of unemployment, especially long-term unemployment, and earn on average far less than employees who have vocational qualifications. Furthermore, in view of demographic trends, young people in particular are needed as skilled workers in the labour market.

It should be noted that major changes were made to the microcensus data collection methodology in 2020. ¹⁷⁵ In light of this, according to the Federal

- 172 A change in the microcensus survey methodology has meant that from 2017, results can only be provided based on the population in private households. The results from previous years have therefore been adjusted and differ from those presented in earlier Reports on Vocational Education and Training (for more details, see the Data Report accompanying the Report on Vocational Education and Training 2019, Chapter A 11.3). The data for the 2020 reporting year is based on the final results of the 2020 microcensus (as at February 2022).
- 173 People with no vocational qualifications, or "unskilled workers" (also referred to as "people without formal qualifications"), include, in this context, all people (capable of work) who do not have a qualification from a dual or school-based vocational training programme, or from studying at a university of applied sciences or higher education institution (or an equivalent qualification), as well as people who have undertaken informal on-the-job training (Anlernausbildung) or an internship. People who have not yet completed their education or training (school students, trainees, and university students) and those engaged in a voluntary service year are not counted as people with no vocational qualifications. The proportion of unskilled workers is defined as the number of people with no vocational qualifications as a percentage of all people in the relevant age cohort. (For more details, see the 2022 Data Report, Chapter A 11.1.)
- 174 This group is very heterogeneous. It is made up of mainly less-qualified people who tend to have problems in the labour market, but also people who have dropped out of training or tertiary studies, for example. They are formally regarded as having low-level qualifications or as unqualified, but have fewer problems integrating into the labour market because they have already gained qualifications and often only drop out of training or tertiary studies when they have found prospective employment.
- 175 For more details, see Federal Statistical Office (2021): Qualitätsbericht Mikrozensus 2020 (2020 Microcensus Quality Report).

¹⁶⁹ See Federal Statistical Office press release no. 414 of 3 September 2021 (destatis.de/DE/Presse/Pressemitteilungen/2021/09/ PD21 414 213.html).

¹⁷⁰ For a longer time series, see the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 10.1.1.

¹⁷¹ By way of comparison, the rates of transfer into employment in 2019 were: 1 to 9 employees: 65%; 10 to 49 employees: 73%; 50 to 499 employees: 78%; 500 employees and above: 88%.

Table 18: Young adults with no vocational qualifications, 2015 to 2020*

	20- to 24-year-olds		20- to 29-year-olds		25- to 34-	-year-olds	20- to 34-year-olds	
Year	Unskilled (in%)	Absolute (in millions, extrapolated figure)	Unskilled (in%)	Absolute (in millions, extrapolated figure)	Unskilled (in %)	Absolute (in millions, extrapolated figure)	Unskilled (in %)	Absolute (in millions, extrapolated figure)
2015	12.1	0.52	12.6	1.19	13.6	1.38	13.2	1.90
2016	13.3	0.58	13.6	1.32	14.3	1.50	14.0	2.08
2017	13.5	0.59	13.9	1.35	14.5	1.53	14.2	2.12
2018	13.9	0.61	14.0	1.33	14.6	1.51	14.4	2.12
2019	13.8	0.61	14.4	1.34	15.1	1.55	14.7	2.16
2020*	13.9	0.63	14.7	1.38	16.2	1.70	15.5	2.33

The figures are based on the population in private households and data from the 2011 census.

Statistical Office, it is no longer possible to compare the rates of unskilled workers from the 2020 reporting year onwards with those in previous years. This section therefore refrains from directly comparing the rates with those from the previous year. Results for earlier reporting years can be found in **Table 18** and in previous Reports on Vocational Education and Training.¹⁷⁶ The coronavirus pandemic also limited data collection, as in-person surveys, among other things, were almost impossible in 2020. Results based on the 2020 microcensus must therefore be interpreted with caution.

Looking at the proportion of unskilled workers by age group, the picture in the 2020 reporting year is as follows: the rate for younger adults aged 20 to 24, at 13.9%, was lower than for people aged 25 to 34 (16.2%). This is because younger people are more often in education or training.

Young women aged between 20 and 34 had a lower percentage of unskilled workers in 2020, at 14.3%, than young men in the same age group (16.6%).

Percentages of unskilled workers varied considerably depending on a young person's school-leaving certificate. People without a school-leaving qualification are at particular risk of not gaining any vocational qualifications. In 2020, the proportion of unskilled workers among people aged 20 to 34 in this group was 64.4%. The higher the level of a young person's school-

leaving certificate, the less likely they are to become an unskilled worker (holders of a secondary general school certificate: 35.8%; of an intermediate school-leaving certificate: 13.3%; of a higher education entrance qualification: 7.4%).

People from a migrant background remain disproportionately often without vocational qualifications. In 2020, 34.8% of 20- to 34-year-old migrants with personal experience of migration were unskilled workers without qualifications. The figure for people from a migrant background who were born and grew up in Germany was 17.6%. The proportion of unskilled workers for Germans not from a migrant background was 8.9% in 2020.¹⁷⁷

Statements on people who have no vocational qualifications can be made based on National Educational Panel Study (NEPS) data. Analyses carried out by the BIBB have shown, among other things, that people who have no vocational qualifications do regard second-chance training and upskilling as worthwhile. Despite the expected positive effects,

^{*} Please note: a change in the survey methodology means that the results of the microcensus from 2020 onwards are not comparable with earlier years. Source: Research Data Centre of the Statistical Offices of the Federal States, microcensus 2015 to 2020; BIBB calculation.

¹⁷⁶ For longer time series before the 2020 reporting year, see also the 2022 Data Report, Chapter A 11.

¹⁷⁷ For more information, see the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 11.3.

¹⁷⁸ The NEPS tracks around 14,000 people in the 1944 to 1986 birth cohorts on their education, training, work, and life paths. The fourth wave of the surveys, which was carried out from the autumn of 2011 to the spring of 2012, surveyed 3,172 people aged between 25 and 35, of whom 369 (11.6%) were in the group of those who did not (yet) have a vocational qualification and at that time were also not in school-based training, vocational training or academic education leading to a full qualification. Another 136 people were still in training when the survey was carried out, so the comparison group is made up of the remaining 2,667 people who already had formal vocational qualifications when the survey was carried out.

however, the proportion of those planning to gain a (further) qualification is lower among people with no vocational qualifications than it is among those with a vocational qualification. The reasons most often given for this are that costs are too high and a lack of knowledge about the courses available. Moreover, only around half of those without vocational qualifications regarded their personal prospects of success as good.¹⁷⁹

2.6 Upgrading skills through vocational training, and continuing vocational education and training

Like academic education, vocational training offers attractive promotion and career advancement prospects and paves the way for people to attain senior skilled and managerial positions and to become self-employed.

According to the Federal Employment Agency, higher education graduates and holders of vocational qualifications are far more rarely unemployed than people with no vocational qualifications. In 2021, 20.6 % of people with no vocational qualifications were unemployed nationally (2019: 17.7%; 2020: 20.9%), while the unemployment rate among those with an academic education was 2.4% (2019: 2.1%; 2020: 2.6%). The unemployment rate of people who have completed company-based or school-based vocational training was 3.5% (2019: 3.1%; 2020: 3.6%). 180

In the context of upgrading skills through vocational training, the trend in the unemployment rate among people with an advanced vocational qualification is of interest. According to the Institute for Employment Research (IAB), a separate review of unemployment rates among people with advanced training qualifications has not been possible since 2006, so the IAB records additional qualification-specific unemployment rates for this group. 181 The IAB's results show

Vocational Education and Training 2018, Chapter A 11.4.

that the unemployment rates for people who have completed training at a trade and technical school, or Meister or technician's training, has been at a very low level and falling for years (2017: 1.5%; 2018: 1.2%; 2019: 1.2%). The unemployment rate for this group is even lower than it is for higher education graduates (2017: 2.1%; 2018: 2.1%; 2019: 2.0%). 182

In reviewing these unemployment rates, it should be noted that these are average figures that do not reflect some significant differences between occupations and among groups of people in the same occupations. This is true of both academic education and vocational training and of any direct comparisons between the two.

Analyses carried out by the Federal Institute for Vocational Education and Training (BIBB) have also shown that training to upgrade vocational skills is worthwhile:

The 2018 survey of employees carried out by the BIBB and the Federal Institute for Occupational Safety and Health (Bundesanstalt für Arbeitsschutz und Arbeitsmedizin) found that employees with an advanced vocational qualification were more often in managerial careers183 than employees who had not undergone training to upgrade their skills (65 % vs. 38 %). They were also more likely to be in a supervisory role than those who had completed company-based training but had not undergone advanced vocational training (45% vs. 23%), and with an average gross monthly income of 3,900 euros, they earned on average around 900 euros more. Asked about the benefits of their training (subjective evaluation), around half of the employees surveyed who had undergone training to upgrade their skills said that in terms of securing them a higher income and a more responsible position, it had been at least useful or very useful. Asked about their overall assessment of how beneficial it had been ("all in all"), two out of three of those surveyed said that it had been useful or very useful.184

¹⁸⁰ See Federal Employment Agency statistics. Qualifikationsspezifische Arbeitslosenquoten (Jahreszahlen) (Qualification-specific unemployment rates (annual figures)) (statistik.arbeitsagentur.de/DE/ Navigation/Statistiken/Fachstatistiken/Arbeitsuche-Arbeitslosigkeit-Unterbeschaeftigung/Produkte/Berufs-qualifikationsspezifische-Arbeitslosenquoten-Berufs-qualifikationsspezifische-Arbeitslosenquoten-Nav.html).

¹⁸¹ As an alternative to the Federal Employment Agency statistics on the unemployed, these calculations are based on microcensus data on

the jobless. The jobless are not directly comparable with the unemployed due to differences in delineation, but they are essentially defined by the same criteria: unemployment or joblessness, availability on the labour market, and looking for work. See doku.iab.de/kurzber/2015/kb1115.pdf.

¹⁸² See doku.iab.de/arbeitsmarktdaten/Qualo_2020.pdf. As of April 2022. more recent data is not available.

¹⁸³ A managerial career is defined as one involving responsibility for projects or budgets.

¹⁸⁴ See the Data Report accompanying the Report on Vocational Education and Training 2021, Chapter C 3.2.

A BIBB analysis based on data from the National Educational Panel Study (NEPS) confirms the differences between employees who have undergone training to upgrade their skills and those who have not in terms of their professional positions, incomes, and working conditions. It found that employees with advanced vocational qualifications were more often entrusted with a diverse range of tasks that they could perform largely autonomously. Their professional activities more often demanded frequent interactions with other people, and they were somewhat less likely to work shifts and/or nights than people who had not undergone training to upgrade their skills. Conversely, those who had completed Meister training, in particular, said more often that they were under pressure to perform and work within deadlines, doubtless due in part to the large proportion of self-employed professionals in this group. They were also more likely to work under time-related pressures such as overtime (employees who had completed technical training were also affected by this issue) than people who had not completed advanced vocational training. 185

According to analyses carried out by the Federal Statistical Office based on data from the microcensus, the proportion of the population who have completed advanced vocational training to upgrade their skills is stagnating. Since 2005, the proportion of the population holding advanced vocational qualifications (and comparable qualifications) has ranged between 6% and 9%, with slight fluctuations. In contrast, the proportion of the population with a university degree has increased from 12% to 19% in 2020. See also the BIBB Data Report accompanying the Report on Vocational Education and Training 2021, which looked at advanced vocational training in its feature chapter. 1877

A BIBB analysis for the Data Report accompanying the Report on Vocational Education and Training 2022 examines the question of what role prior professional experience plays in the labour market transitions of university graduates. The focus was on people with a bachelor's degree who had obtained an initial vocational qualification prior to beginning their tertiary studies. The NEPS was the source of the data. The results show that graduates with a bachelor's degree who had an initial vocational qualification transitioned to employment more quickly than those without an initial vocational qualification. They were also less likely to report difficulties in looking for a job. They seem to benefit from their prior professional experience in several respects: firstly, due to their experience of the world of work and application processes; secondly, from social resources they have collected in the companies where they trained, which they can leverage when looking for a job. 188

A prior vocational qualification can benefit university graduates later in their working lives as well. According to the NEPS results, graduates with a vocational qualification were, for example, more often in managerial positions than those without an initial vocational qualification.¹⁸⁹

It should be noted that these studies reflect the situation prior to the coronavirus pandemic.

The vocational training statistics of the federal and Länder statistical offices gather data annually on people sitting advanced vocational training exams under the Vocational Training Act (Berufsbildungsgesetz) or the Crafts Code (Handwerksordnung), and on pass rates for these exams. In 2020, 78,285 examinees successfully passed an advanced vocational training exam (51,111 men and 27,174 women; see **Table 19**). The number of examinations passed overall fell significantly compared with the previous year (90,276) (–11,991 exams or –13.3%). Again, this is linked to the coronavirus pandemic and the measures taken to contain it.

The pass rate in 2020 was 81.8% (2019: 82.9%).¹⁹⁰ It was somewhat higher for men (82.2%) than for women (81.1%). Since 2012, the number of people taking advanced vocational training examinations

¹⁸⁵ For more details, see the Data Report accompanying the Report on Vocational Education and Training 2021, Chapter C 3.5.

¹⁸⁶ Meister qualifications, technical qualifications, and comparable qualifications gained at trade and technical schools, as well as training as an early childhood educator. Up to and including 2013, this also included vocational training lasting two or three years in healthcare and social services occupations, which must be kept in mind when examining figures over longer periods of time.

¹⁸⁷ See the Data Report accompanying the Report on Vocational Education and Training 2021, Chapter C.

¹⁸⁸ See the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 10.4.1.

¹⁸⁹ See the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter A 10.4.2.

¹⁹⁰ For information on examination pass rates after initial vocational training, see **Chapter 2.4.6**.

Table 19: Advanced vocational exams under the Vocational Training Act/Crafts Code that were sat and passed

Year	Exams sat			Exams passed			Pass rate in %		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
2010	110,043	70,758	39,285	93,357	61,497	31,860	84.8	86.9	81.1
2011	118,335	76,884	41,451	102,159	67,545	34,614	86.3	87.9	83.5
2012	118,497	78,123	40,371	102,987	69,012	33,975	86.9	88.3	84.2
2013	115,872	75,333	40,539	100,524	66,720	33,807	86.8	88.6	83.4
2014	115,182	75,108	40,071	98,736	65,541	33,195	85.7	87.3	82.8
2015	115,830	75,660	40,170	97,827	64,692	33,135	84.5	85.5	82.5
2016	113,916	75,096	38,820	96,117	64,140	31,977	84.4	85.4	82.4
2017	112,239	73,902	38,340	94,212	62,724	31,488	83.9	84.9	82.1
2018	108,924	71,661	37,263	91,038	60,477	30,561	83.6	84.4	82.0
2019	108,861	71,829	37,032	90,276	60,120	30,156	82.9	83.7	81.4
2020	95,715	62,205	33,510	78,285	51,111	27,174	81.8	82.2	81.1

Source: Federal Statistical Office, subject-matter series 11, series 3; compiled by the BIBB.

has declined, with a much steeper fall being recorded in 2020^{191}

Continuing vocational education and training

Continuing vocational education and training is one of the keys to securing and sustaining employees' employability in a fast-changing world of work. It both ensures a supply of skilled workers and supports Germany's competitiveness and ability to innovate, which are essential in making it a country in which business can thrive.

Around 267,600 people (117,400 women and 150,300 men) began continuing vocational training funded by the Federal Employment Agency under Book III or Book II of the Social Code (Sozialgesetzbuch) in 2021, 2% fewer than in 2020. Most of these continuing vocational training activities, at 177,000, were funded under Book III of the Social Code, but the number funded under Book II of the Social Code increased by over 3% compared to the previous year, to 90,600. As in the previous year, 62,500 continuing vocational training activities begun in 2021 resulted in a vocational qualification upon completion (Book III of the Social Code: 42,300, Book II: 20,300). Despite the overall slight downward trend in the number of

continuing vocational training activities, nearly 14% more activities were funded in 2021, at around 34,000 employees, than in the previous year. In general, funding and support for continuing education and training has gained momentum since 2019, boosted by the Skills Development Opportunities Act (Qualifizierungschancengesetz), the Work of Tomorrow Act (Arbeit-von-Morgen-Gesetz) that builds on it, and the associated qualification campaign. The strengthening of funding and support for continuing vocational education and training is already demonstrating initial success, especially in the case of employees and of people with low-level qualifications. Since 2020, however, the trend has been markedly slowed by the COVID-19 pandemic.

The results of the 2020 wbmonitor survey "Coronavirus – impacts on providers of continuing education and training" carried out by the BIBB and the German Institute for Adult Education show that wide-ranging effects on the continuing training sector were already visible in spring/summer 2020. Continuing education and training activities were directly affected by the lockdown that began in mid-March. While, on average, 40% of courses that were already ongoing at the start of the lockdown were able to be continued – primarily by switching to online formats – the vast majority of courses that were due to begin during the lockdown had to be postponed or cancelled (77%). The Report on Vocational Education and Training 2021

<sup>191 2012: 118,497; 2013: 115,872; 2014: 115,182; 2015: 115,830;
2016: 113,916; 2017: 112,239; 2018: 108,924; 2019: 108,861;
2020: 95,715;</sup> see the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter B 4.2.

already reported on the results of the 2020 wbmonitor survey and the difficulties experienced by continuing education and training providers and how they dealt with the impacts of the pandemic.¹⁹²

According to analyses by the German Institute for Adult Education based on data from the Adult Education Survey (AES), the overall rate of participation in continuing vocational education and training has risen from 48% in 2018 to 54% in 2020. The rate of participation in continuing vocational training in companies rose from 43% (2018) to 49% (2020). The rate of participation in individual continuing vocational education and training was also higher (2018: 7%, 2020: 9%). In the case of continuing vocational training in companies, the participation rate for men (51%) was higher than that for women (47%). Women had a somewhat higher rate of participation in individual continuing vocational education and training (10%) than men (17%). 193

Compared with earlier years, the duration of continuing education activities was shorter, according to the 2020 Adult Education Survey. This is believed to be linked to the coronavirus pandemic, which led to continuing education activities being cut short and postponed, as well as format changes. The results are presented in detail in the Data Report accompanying the Report on Vocational Education and Training 2022 and in the 2020 AES Trend Report. When interpreting the data, it is important to note that only around eight of the more than 15 months covered in the AES took place after the first nationwide lockdown (March 2020). In other words, a portion of the continuing education

activities were not affected by the pandemic. The survey ended roughly at the start of the partial lockdown in November 2020.

According to a study produced by the German Economic Institute (Institut der deutschen Wirtschaft Köln e.V.) and the Institute for Employment Research (IAB) based on data from the IAB survey "Leben und Erwerbstätigkeit in Zeiten von Corona" (Life and employment in the coronavirus pandemic), around 34% of respondents participated in some form of continuing vocational education and training between the start of the pandemic and the summer of 2020.195 The most common form of continuing education was autonomous learning with the assistance of media, including reading specialist material in the form of printed or digital texts, and digital learning media, such as online tutorials. Just under a third made use of learning opportunities while at work, which include, for example, inductions by colleagues or supervisors. Around a quarter of respondents attended seminars and courses. In a majority of cases, however, this was only possible in digital form.

28% of participants who had planned or begun their continuing education activity before the crisis stated that the activity was already planned to be digital or was held digitally. 46% reported that their continuing education activity was able to be fully or partly converted to digital learning formats after the start of the coronavirus crisis. Just under another 27% gave other reasons why the activity was able to take place despite the coronavirus restrictions.

The authors of the study conclude that the COVID-19 pandemic has led to a surge in digitalisation in continuing vocational education and training, which prevented a more significant collapse in participation levels over the period to the summer of 2020. However, there were significant disparities in terms of gender, level of educational attainment, and sector. ¹⁹⁶ It should be noted that this study uses a relatively broad definition of continuing education and training.

¹⁹² See the Report on Vocational Education and Training 2021, special chapter on "The training market during the coronavirus pandemic", and the Data Report accompanying the Report on Vocational Education and Training 2021, Chapter B 2.1.2.

¹⁹³ Women's lower levels of participation in continuing training in companies must be seen in the context that women are still less integrated into working life than men. See Federal Employment Agency (Bundesagentur für Arbeit) (2019): Die Arbeitsmarktsituation von Frauen und Männern 2018 (Berichte: Blickpunkt Arbeitsmarkt) (The labour market situation of women and men, 2018 (Reports: Labour Market Overview)), Nuremberg (statistik.arbeitsagentur.de/ DE/Navigation/Statistiken/Themen-im-Fokus/Frauen-und-Maenner/ Frauen-und-Maenner-Nav.html).

¹⁹⁴ See the Data Report accompanying the Report on Vocational Education and Training 2020, Chapter B 1.1, and Bilger, Frauke; Strauß, Alexandra (2021): Weiterbildungsverhalten in Deutschland 2020. Ergebnisse des Adult Education Survey – AES-Trendbericht (Continuing education activities in Germany, 2020. Results of the Adult Education Survey – AES Trend Report). Bonn (bmbf.de/SharedDocs/Publikationen/de/bmbf/1/31690_AES-Trendbericht_2020.html).

¹⁹⁵ All forms of continuing vocational education and training were included, irrespective of how they were funded (privately or by the employer).

¹⁹⁶ See Flake, Regina; Janßen, Simon; Leschnig, Lisa; Malin, Lydia; Seyda, Susanne (2021): Berufliche Weiterbildung in Zeiten von Corona. Kein dramatischer Einbruch, aber deutliche gruppenspezifische Unterschiede (Professional training in times of Corona: No dramatic slump, but clear group-specific differences), IW-Report, no. 43 (iwkoeln.de/studien/regina-flake-lydia-malin-susanne-seyda-kein-dramatischer-einbruch-aber-deutlichegruppenspezifische-unterschiede.html).

The following section focuses on continuing education and training in companies.

The IAB Establishment Panel also examines the continuing training offered by companies and the participation of employees in these kinds of learning opportunities.¹⁹⁷ In this context, the focus is on traditional continuing training organised in the form of courses.

According to the IAB Establishment Panel, somewhat over half of companies have been engaged in providing continuing training to their employees in recent years. A review of the figures over a longer period reveals a substantial increase in companies' provision of continuing education and training. In 2001, only 36% of companies provided continuing education and training, but this rose to 55% in 2019. 198

In 2020, participation in continuing education and training fell sharply. The proportion of companies offering continuing training to their employees was just 34%.¹⁹⁹ The IAB states that this fall was primarily due to the social distancing measures introduced to contain the pandemic, but financial reasons also played a role, as did the uncertain business outlook.

While in 2019 45% of micro-enterprises with fewer than ten employees provided continuing training to their employees, this figure fell to just 26% in 2020. Small companies with 10 to 49 employees recorded a decline from 70% to 47%. However, medium-sized and larger companies also cut back on their provision of continuing education and training during the crisis. The proportion of medium-sized companies with 50 to 499 employees which provided continuing education and training fell from 91% to 68%, while the figure for large companies with more than 500 employees fell from 99% in 2019 to 80% in 2020.

According to the IAB Establishment Panel, half of those companies providing continuing education and training in 2020 made use of e-learning. Almost three-quarters of these companies did so because of social distancing measures, while the remaining quarter offered e-learning irrespective of social distancing. The results of the IAB Establishment Panel also show that more than a third of companies that used e-learning in the crisis were introducing this form of learning for the first time. 44% increased their use of e-learning during the crisis.²⁰⁰

The number of employees who benefit from continuing vocational education and training provided in their companies can be determined using the rate of employee participation in continuing education and training. It reflects the proportion of employees who participate in continuing education and training provided by their companies relative to all employees. According to the results of the IAB Establishment Panel, the rate of employee participation in continuing education and training has hovered around one-third of employees since 2011; in 2019, it was 36%. The rate fell to 15% in 2020. The rates of employee participation in continuing education and training do not vary a great deal by the size class of companies, ranging between 14% and 16% in 2020.

The IAB analyses show that there is a link between how demanding a job is and how frequently an employee participates in continuing education. In 2019, 45% of employees with a vocational qualification or university degree participated in continuing education and training activities. The figure for employees in low-skilled positions, by contrast, was just 22%. As a result of the pandemic, participation rates have fallen for both groups of employees. In 2020, 20% of employees in skilled positions participated in continuing education and training provided by their companies, while the rate for employees in low-skilled jobs dropped to 6%. Inequalities in access to continuing education and training were thus exacerbated in the first year of the pandemic.

¹⁹⁷ The IAB Establishment Panel defines a company as providing continuing education and training when it supports these activities by at least partly releasing its employees from work for training purposes and/or paying the costs of these activities wholly or in part.

¹⁹⁸ See the Report on Vocational Education and Training 2021, Chapter 2.6.

¹⁹⁹ See also the Data Report accompanying the Report on Vocational Education and Training 2022, Chapter B 1.2, and Dettmann, Eva; Diegmann, André; Mertens, Matthias; Müller, Steffen; Plümpe, Verena; Leber, Ute; Schwengler, Barbara (2021): Die deutsche Wirtschaft in der Pandemie. Ergebnisse aus dem IAB-Betriebspanel 2020 (The German economy in the pandemic. Results from the IAB Establishment Panel 2020) (IAB Research Report 11/2021), Nuremberg (doku.iab.de/forschungsbericht/2021/fb1121.pdf).

²⁰⁰ See Jost, Ramona; Leber, Ute (2021): Die betriebliche Weiterbildung ist in der Corona-Krise massiv eingebrochen (Continuing education and training in companies has fallen sharply in the coronavirus crisis). IAB-Forum, 20 December 2021 (iab-forum.de/die-betrieblicheweiterbildung-ist-in-der-corona-krise-massiv-eingebrochen).

3 Overview of Federal Government labour market policy activities and programmes²⁰¹

Alliance for Initial and Further Training (Allianz für Aus- und Weiterbildung)

Key data

Period: 2019-2022

Website: aus-und-weiterbildungsallianz.de

Goal of the measure

As a central political platform, strengthening the attractiveness, quality, and performance of dual vocational training and its power to promote integration. It seeks to recruit more companies and young people to participate in dual training, bring them together, and maintain their engagement in training.

Current state of play

On 17 March 2021, the Alliance adopted a "Joint action plan to strengthen companies providing training and young people in the coronavirus pandemic" (Gemeinsame Aktion zur Stärkung von Ausbildungsbetrieben und jungen Menschen in der Corona-Pandemie), containing a series of (additional) measures to stabilise the training market.

Key elements of the joint action plan include:

- Further developing the "Safeguarding training places" federal programme with significantly higher subsidies and improved conditions for receiving subsidies
- · Strengthening career orientation in the pandemic
- Financial support for exam preparation for trainees
- "Summer of Vocational Training" initiative,
 #AusbildungSTARTEN as a joint recruitment campaign for dual vocational training

In their coalition agreement, the parties of the governing coalition have stated that they intend to continue the Alliance for Initial and Further Training as an "alliance for vocational training".

Recognition grant (Anerkennungszuschuss)

Kev data

Period: new applications accepted until 2022 Funding volume: 1.5 million euros in 2022 Website: anerkennung-in-deutschland.de

Goal of the measure

Increasing the uptake of the process for the recognition of foreign professional qualifications.

Current state of play

Since the end of 2019, more than 6,300 applications for financial support with the costs of the process have been received. By the end of December 2021, the recognition grant had already been paid to around 2,300 people. Roughly 55% of applications are submitted by women.

ASCOT+ research and transfer initiative: funding programme for digital skills assessment in vocational education and training (Forschungs- und Transferinitiative: Förderprogramm zur Digitalen Kompetenzmessung in der beruflichen Bildung)

Key data

Period: 2019-2023

Funding volume: 9.0 million euros

Website: ascot-vet.net

Goal of the measure

Improving learning and teaching processes in vocational training, providing objective performance

evaluation, and further developing skills-oriented examinations.

Current state of play

The six ASCOT+ projects have been extended by one year due to the pandemic. Integrating practitioners into research work to promote transfer was a priority in 2021.

²⁰¹ These activities are the responsibility of the relevant Federal Ministries and are financed entirely by them in the long term as part of current budgetary and financial planning (including positions/planned positions), taking budgetary and fiscal guidelines into consideration.

Assisted training (Assistierte Ausbildung)

Key data

Enshrined in law since 2020 as an updated, permanent support instrument that now incorporates assistance for trainees during training.

Actual expenditure²⁰²: 64.10 million euros in 2021

(Book III and Book II of the Social Code (Sozialgesetzbuch))

Goal of the measure

Providing continuous social and educational support individually tailored to young people's needs before

and during their vocational training in companies; support is also provided to the companies involved.

Current state of play

An updated statutory basis has been provided by the Work of Tomorrow Act (Arbeit-von-morgen-Gesetz). The preliminary phase of the new "Assisted training" programme started in the spring of 2021, and the phase of assistance during training began in the summer of 2021.

The Upgrading Training Assistance Act (Aufstiegsfortbildungsförderungsgesetz)

Key data

Period: since 1996

Budget allocation: around 537 million euros in 2021

(78 % from the Federation and 22 %

from the Länder)

Website: aufstiegs-bafoeg.de

Goal of the measure

Expanding participation in vocational training to upgrade skills and boosting the motivation of young

skilled workers in Germany to undertake advanced vocational training.

Current state of play

In 2020, 178,165 people received funding under the Act to help them to participate in upgrading training in the vocational training system.

Professional advancement scholarship (Aufstiegsstipendium)

Key data

Period: since 2008

Funding volume: 30.4 million euros in 2021 Website: sbb-stipendien.de/aufstiegsstipendium

Goal of the measure

Reinforcing the parity of vocational training and academic education and increasing opportunities

for transfer within the education and training system.

Current state of play

Every year, scholarships are awarded to roughly 1,000 new recipients. Around 13,940 scholarships have been awarded since the programme started.

Support during training, section 75 of Book III of the Social Code (Ausbildungsbegleitende Hilfen)

Key data

Actual expenditure²⁰³: 78.69 million euros in 2021 (Book III and Book II of

the Social Code)

Website: arbeitsagentur.de

Goal of the measure

Helping trainees to start and complete vocational training by providing special and remedial classes and

social and educational mentoring to enable trainees to overcome language and education deficits.

Current state of play

The Work of Tomorrow Act (Arbeit-von-morgen-Gesetz) has consolidated assistance during training with the benefits provided under the updated "Assisted training" (Assistierte Ausbildung) program, with effect from the summer of 2021.

²⁰² Including spending on rehabilitation measures.

²⁰³ Including spending on rehabilitation measures.

Vocational Training Initiative for the Care Sector (Ausbildungsoffensive Pflege)

Key data

Period: 2019-2023

Funding volume: 16 million euros Website: pflegeausbildung.net

Goal of the measure

Supporting the introduction of the new forms of care and nursing training under the Care Professions Act (Pflegeberufegesetz), which were launched in 2020, and further increasing the number of trainees and organisations providing training.

Current state of play

As part of Vocational Training Initiative for the Care Sector, a total of 111 measures were developed to recruit well-trained and engaged nurses and care specialists for this area and to support nursing schools, hospitals providing training, and long-term care facilities in the transition to the new forms of care and nursing training. The first report on the initiative, from November 2020, is available at: pflegeausbildung.net/ausbildungsoffensive-pflege/berichte-zur-kap.html. The second report, on the state of play regarding implementation of the agreements reached as part of the wider Concerted Action for Nursing (Konzertierte Aktion Pflege), was published in August 2021 and is available at: bundesgesundheitsministerium.de/fileadmin/Dateien/3_Downloads/K/Konzertierte_Aktion_Pflege/KAP_Zweiter_Bericht_zum_Stand_der_Umsetzung_der_Vereinbarungen_der_Arbeits gruppen_1_bis_5.pdf.

Placement in training, section 35 et seqq. of Book III of the Social Code (Ausbildungsvermittlung)

Key data

Website: arbeitsagentur.de

Goal of the measure

Supporting young people in their search for a training place and also employers in successfully filling their vacant training places.

Current state of play

In the 2020/2021 reporting year, around 511,000 vocational training places in total were registered with the Federal Employment Agency. There were around 165,000 female applicants and 269,000 male applicants for training places (total: 434,000).

AusbildungWeltweit

Key data

Period: 2018-2024

Funding volume: 2 million euros until 2021

Website: ausbildung-weltweit.de

Goal of the measure

Enabling young people to learn around the world as part of dual or school-based initial vocational training, thus meeting the needs of global enterprises for

skilled workers with international vocational skills while also making vocational education and training more attractive.

Current state of play

Since 2018, around 1,200 learning placements have been approved in more than 40 countries on all continents.

Non-company vocational training, section 76 of Book III of the Social Code (Außerbetriebliche Berufsausbildungen)

Key data

Actual expenditure²⁰⁴: 225.19 million euros in 2021 Website: arbeitsagentur.de

Goal of the measure

Enabling disadvantaged young people to complete vocational training with a training provider, with the goal of making it possible for them to transition into training in a company.

Current state of play

In 2021, a total of 11,000 young people (4,000 women and 7,000 men) began non-company training.

Around 59% of the participants (55.3% of the women and 60.7% of the men) were in employment subject to social security contributions six months after completing the programme (integration rate).

Vocational education and training for sustainable development in transfer for training personnel in line with the National Skills Strategy and the Climate Action Programme 2030 (Berufsbildung für nachhaltige Entwicklung im Transfer für Ausbildungspersonal gemäß Nationaler Weiterbildungsstrategie und Klimaschutzprogramm 2030)

Key data

Period: 2020-2023

Funding volume: around 2.8 million euros

Websites: bbne.de, bmbf.de/bbne

Goal of the measure

Enabling the transfer of key skills relating to sustainable development in continuing vocational training for training personnel.

Current state of play

To ensure the transfer of continuing training strategies for training personnel that were developed and trialled as part of Vocational Education and Training for Sustainable Development, funding is being provided for pilot projects to establish and disseminate successful continuing training for training personnel in companies that incorporates key sustainability skills. The seven pilot projects selected were launched in November 2020 and will run until the fourth quarter of 2022 or the first quarter of 2023.

Vocational education and training for sustainable development in the global action programme on education for sustainable development (Berufsbildung für nachhaltige Entwicklung im Weltaktionsprogramm Bildung für nachhaltige Entwicklung)

Key data

Period: 2015-2021

Funding volume: around 12 million euros

Websites: bbne.de,

nachhaltig-erfolgreich-fuehren-ihk.de, nachhaltiges-handwerk.de

Goal of the measure

Developing sustainability skills among trainees and training personnel, and dissemination of findings on the design of sustainable company-based learning settings.

Current state of play

After the successful completion of pilot projects on sustainability skills for commercial occupations and the design of sustainable company-based learning settings in 2019, six further pilot projects took place on sustainability skills in the food industry and were successfully completed in October 2021.

Flanking projects also address management and company leadership in SMEs.

Career Orientation for Refugees (Berufliche Orientierung für Zugewanderte)

Key data

Period: since 2016

Funding volume: 20 million euros annually,

11 million euros in 2022

Website: berufliche-orientierung-für-zugewanderte.de

Goal of the measure

Sustainable integration into vocational training of people from a migrant background who are no longer of school age.

Current state of play

Since 2016, more than 5,500 immigrants throughout Germany who require extra support due to the circumstances resulting from their migration have taken part in Career Orientation for Refugees courses. Around half of those who successfully completed a Career Orientation for Refugees course have been successfully placed in vocational training or in introductory training.

Allowance for basic vocational training, section 56 of Book III of the Social Code (Berufsausbildungsbeihilfe)

Key data

Actual expenditure²⁰⁵: 262.78 million euros in 2021 Website: arbeitsagentur.de

Goal of the measure

Helping trainees undergoing vocational training or pre-vocational training to overcome economic difficulties.

Current state of play

In 2021, an average of around 54,000 people received the allowance for basic vocational training during vocational training, while around 16,000 people received it while participating in pre-vocational training.

Careers guidance and orientation by the Federal Employment Agency, section 29 et seqq. of Book III of the Social Code (Berufsberatung und Berufsorientierung durch die Bundesagentur für Arbeit)

Key data

Website: arbeitsagentur.de

Goal of the measure

Supporting people in the context of career orientation and the process of choosing courses of studies and occupations throughout their entire working lives.

Current state of play

The implementation of careers guidance for young people before they enter working life continued at general schools and vocational schools in 2021. The target group of people who are not school students, as well as that of university students, has been included since 2021.

Job-related German language courses under section 45a of the Residence Act (Berufsbezogene Deutschsprachförderung nach § 45a Aufenthaltsgesetz)

Key data

Actual expenditure: 348.28 million euros in 2021 Website: bmas.de/berufssprachkurse

Goal of the measure

Teaching German language skills relating to the world of work, up to level C1 of the Common European Framework of Reference for Languages (CEFR).

Current state of play

After the number of people starting these measures grew continuously to just under 181,000 in 2019, the pandemic resulted in a lower number of people starting these courses. However, virtual course models meant that in 2021 somewhat over 102,000 people (58% of them women and 42% men) were still able to start learning in one of the around 7,750 courses offered.

Vocational education and training for sustainable development – indicators (Berufsbildung für nachhaltige Entwicklung: Indikatoren)

Key data

Period: 2019-2022

Funding volume: around 0.95 million euros

Goal of the measure

Development of indicators or indicator sets so that the role of Education for Sustainable Development in vocational education and training can be captured in national educational reporting and the German Sustainable Development Strategy.

Current state of play

Relevant indicators for Vocational Education and Training for Sustainable Development were trialled in 2021, and they were reviewed and developed further with a view to their usability.

Promoting vocational education and training for sustainable development (Berufsbildung für nachhaltige Entwicklung befördern)

Key data

Period: 2015-2022

Funding volume: 14.42 million euros in federal funding

and 20.65 million euros in ESF

funding

Website: esf.de/bbne

Goal of the measure

Raising young people's awareness of sustainable practices in their daily work by providing non-school-based career orientation.

Current state of play

A total of 28 projects are being funded by the programme until the end of 2022 (see bmuv.de/themen/bildung-beteiligung/bildung/foerderprojekte/nachhaltige-arbeitswelt).

Vocational Training without Borders (Berufsbildung ohne Grenzen)

Key data

Period: 2020-2023

Funding volume: around 3.2 million euros annually Website: berufsbildung-ohne-grenzen.de

Goal of the measure

Funding for mobility coaches, who support SMEs in enabling their trainees, young skilled workers,

or training personnel to spend time learning and working abroad.

Current state of play

Currently, funding is being provided for around 35 mobility coaches at chambers, as well for a central coordinating office. The coaches were consulted 9,215 times in 2021.

Career start mentoring under section 49 of Book III of the Social Code (Berufseinstiegsbegleitung)

Key data

Actual expenditure: 107.73 million euros in 2021

Website: arbeitsagentur.de

Goal of the measure

Supporting students at general schools who need extra support in managing the transition from school to vocational training.

Current state of play

In 2021, around 14,000 young people in total (around 6,000 women and 8,000 men) began receiving career start mentoring. Roughly 41% of participants (34.0% of the women and 45.4% of the men) were in employment subject to social security contributions six months after completing the measure (integration rate).

Career orientation measures, section 48 of Book III of the Social Code (Berufsorientierungsmaßnahmen)

Key data

Actual expenditure: 59.31 million euros in 2021 Website: arbeitsagentur.de

Goal of the measure

Providing of comprehensive career orientation and support for students at general schools as they prepare to choose occupations.

Current state of play

These career orientation measures are provided on an ongoing basis.

Vocational Orientation Programme (Berufsorientierungsprogramm)

Key data

Period: since 2008

Funding volume: 77 million euros annually (including

the Berufenavi site for 2021) Websites: berufsorientierungsprogramm.de,

berufenavi.de

Goal of the measure

Ensuring, with support from providers, that school students are well-equipped to choose their career. The berufenavi.de website offers a wide range of information to help young people to choose an occupation,

and it links to websites with further details. The Vocational Orientation Programme is the key element of the Education Chains initiative.

Current state of play

The Berufenavi website was developed by the Federal Institute for Vocational Education and Training (BIBB) in the context of the digital career orientation measures undertaken by the Federal Ministry of Education and Research (BMBF), and it has been online since mid-October 2021. It is being funded by the BMBF until the end of 2025.

Professional Qualifications Assessment Act (Berufsqualifikationsfeststellungsgesetz)

Key data

Website: anerkennung-in-deutschland.de

Goal of the measure

Ensuring transparency about the professional qualifications of skilled workers from outside Germany.

Current state of play

More than 422,000 applications for recognition of foreign vocational qualifications in occupations regulated by federal and Länder laws and for Statements of Comparability for occupations requiring

academic qualifications have been submitted since 2012. Almost 205,000 of these applications were for the recognition of foreign qualifications in occupations that are regulated by German federal law, of which around 120,000 resulted in full recognition of the qualification. The number of applications for recognition of qualifications in occupations regulated by federal law fell slightly, by 4.8 %, in 2020 compared to 2019, but it is still 8 % higher than the number of applications in 2018. Women submitted around 56 % of applications in 2020.

Pre-vocational training, section 51 of Book III of the Social Code (Berufsvorbereitende Bildungsmaßnahmen)

Key data

Actual expenditure²⁰⁶: 193.52 million euros in 2021 Website: arbeitsagentur.de

Goal of the measure

Assisting young people who need extra support in preparing for vocational training; this may also include the acquisition of a secondary general school certificate.

Current state of play

Around 46,000 young people (17,000 women and 29,000 men) took part in pre-vocational training in 2021. Around 54% of participants (51.8% of the women and 54.6% of the men) were in employment subject to social security contributions six months after completing the measure (integration rate).

Continuing education bonus (Bildungsprämie)

Key data

Period: 2014–2021 (third funding phase)
Funding volume: 45.5 million euros in ESF funding

(third phase) Website: bildungspraemie.info

Goal of the measure

Increasing low earners' motivation to participate in individual continuing vocational education and training, and to contribute to securing the

skilled labour base by boosting participation in continuing education.

Current state of play

Over the course of the entire programme, more than 400,000 grant vouchers have been issued with the aim of supporting individual continuing vocational education and training goals. The average value of the voucher was around 350 euros, and the recipients' own contribution was around 620 euros on average.

BilRess – Building networks and supporting education providers regarding resource conservation and efficiency (Netzwerkbildung und Unterstützung von Bildungsträgern im Bereich Ressourcenschonung und Ressourceneffizienz)

Key data

Period: 1 June 2019 to 31 December 2024

Funding volume: 255,122 euros

Website: bilress.de/bilress-netzwerk.html

Goal of the measure

Incorporation of education about resources in the various sectors of the education and training system (schools, vocational education and training, higher education, continuing education and training), and

beyond, for policymakers, businesses, social partners, and civil society.

Current state of play

A nationwide network is being developed (with conferences held twice a year); awareness of the topic of resource conservation and efficiency is being raised in all sectors of the education and training system; experience is being shared.

Boys'Day

Key data

Period: since 2011

Funding volume: 659,000 euros in 2021

Website: boys-day.de

Goal of the measure

Recruiting boys and young men for vocational training or tertiary studies in fields such as healthcare, care and nursing, social services, and early childhood and

general education.

Current state of play

Since the programme started in 2011, almost 290,000 boys have taken part in more than 52,000 activities (as at 2019). In 2021, Boys'Day took place as a hybrid event due to the pandemic, with both digital and in-person activities (1,866 in-person activities with 20,444 places; 532 digital activities with 17,852 places).

BQ Portal – information on foreign professional qualifications (Informationsportal für ausländische Berufsqualifikationen)

Key data

Period: April 2019 to March 2024 Funding volume: 4.9 million euros

Website: bq-portal.de

Goal of the measure

Supporting the recognition process for foreign professional qualifications by means of a knowledge management system about foreign education systems and occupational profiles.

Current state of play

The BQ Portal offers 100 country profiles with information on foreign vocational education and training systems, and more than 4,700 occupational profiles from 100 countries. The results of 2,252 evaluation processes (1,828 formal processes and 424 individual evaluation processes) have been added to the BQ Portal.

Bridging Innovation and Learning in TVET (BILT)

Key data

Period: 2019-2025

Funding volume: 319,338 euros in 2021;

7,342,939 euros (total funding)

Websites: unevoc.unesco.org, bibb.de/de/113719.php

Goal of the measure

Facilitating peer learning and knowledge generation on current technological, environmental, and social

transformation processes in the world of work. The thematic focus in this context is new qualifications and competencies in technical and vocational education and training (TVET).

Current state of play

An active European UNEVOC cluster is being developed (see bibb.de/de/135236.php), which is participating in a bridging dialogue with African and Asian partner institutions.

Safeguarding training places (Ausbildungsplätze sichern) federal programme

Key data

Period: 2020-2022

Funding volume: 150 million euros in 2020;

500 million euros in 2021; 185 million euros in 2022

Websites: bmbf.de/bmbf/de/bildung/berufliche-

bildung/foerderinitiativen-und-programur-staerkung-der-berufsbildung/ bundesprogramm-ausbildungsplaetzesichern/bundesprogrammausbildungsplaetze-sichern_node.html, arbeitsagentur.de/unternehmen/finanziell/ bundesprogramm-ausbildungsplaetzesichern,

kbs.de/DE/Bundesprogramm_Ausbildung/node.html

Goal of the measure

Supporting small and medium-sized companies which have been hit particularly hard by the coronavirus pandemic in maintaining or increasing the number of training places they offer, and in continuing vocational training which is already under way.

Current state of play

Since the summer of 2020, two funding regulations have ensured that companies with up to 499 employees which provide training and institutions of the same size that provide training in healthcare and social services occupations receive support to help them maintain the number of training places they offer and to enable vocational training which is already under

way to be continued even if the company providing training is experiencing economic difficulties due to the pandemic. To this end, the following measures are being or have been implemented:

- Training bonuses to enable companies to maintain their level of training provision
- Training bonus plus to encourage companies to increase the number of training places they offer
- Subsidies for training pay and pay for training personnel to prevent trainees having to be put on short-time work
- A bonus when trainees are taken on by new companies to continue their vocational training after their original company has become insolvent or their training contracts have been terminated or cancelled due to the pandemic
- A special Lockdown II grant for micro-enterprises providing training
- Funding for training provided by external providers and collaborative training to enable the short-term continuation of training
- Funding for external exam preparation courses for trainees

Over the course of the programme, more than 100,000 support payments have been made to date, around three-quarters of them in the form of the training bonus plus and the training bonus, followed by subsidies to prevent short-time work. Around 325 million euros has been spent so far in the framework of this programme.

Campaign to recruit early childhood educators: attracting young workers and retaining professionals (Fachkräfteoffensive für Erzieherinnen und Erzieher: Nachwuchs gewinnen, Profis binden) federal programme

Key data

Period: 2019-2022

Funding volume: 160 million euros

Website: fachkraefteoffensive.fruehe-chancen.de

Goal of the measure

Recruiting additional target groups as early childhood educators, retaining skilled workers, and encouraging more attractive training and working conditions.

Current state of play

The programme is being implemented nationwide until mid-2022. Funding is being provided for more than 10,000 people in around 6,200 child day-care centres, including trainees, skilled workers, and childcare assistants.

Federal Government programme to establish continuing training alliances (Bundesprogramm zum Aufbau von Weiterbildungsverbünden)

Key data

First funding regulation, July 2020: 39 cross-sectoral projects

Second funding regulation, August 2021: 15 projects in the automotive and component supply industry and a central coordination centre for all projects Period for all projects: up to 36 months, from December 2020 at the earliest

Goal of the measure

Establishing regional coordination offices to build binding cooperative and networking structures among companies, education and advisory institutions, and all other important stakeholders in the continuing education and training landscape in order to boost participation in continuing education and training, especially in SMEs.

The second funding regulation, in particular, also aims to facilitate cross-sectoral skills development in other, future-oriented sectors. The central coordination centre makes an important contribution, including by supporting the sharing of examples of best practice between the alliances and with external stakeholders.

Current state of play

54 continuing training alliances are being funded nationwide, as well as a coordination centre.

cLabs – change now: education modules on climate action in planning and the skilled trades (Bildungsmodule zu Klimaschutz in Planung und Handwerk)

Kev data

Period: May 2021 to May 2023 Funding volume: 171,950 euros

Goal of the measure

The development, testing, and stabilisation of practical training during employment on the subject of climate

action in engineering and planning occupations, the skilled trades, and technical occupations.

Current state of play

The project was launched according to plan and is on schedule.

German-Israeli Programme for Cooperation in Vocational Education and Training (Deutsch-Israelisches Programm zur Zusammenarbeit in der Berufsbildung)

Key data

Period: Since 1969

Funding volume: 0.5 million euros annually

Website: israel-programm.de

Goal of the measure

Enhancing the intercultural skills of trainees and training personnel from both countries by means of training-related exchanges, project team collaborations, and study visits, developing materials on

specialist topics, and supporting systemic changes to make training more practice-based.

Current state of play

As a bridging activity, a bilateral virtual exchange took place in 2021 for around 80 trainees and training personnel in the culinary sector with the "We – Future Chefs" competition. The new website israel-programm.de has brought together all information on the programme since 2021.

Digital media in vocational education and training (Digitale Medien in der beruflichen Bildung)

Key data

Period: 2012-2019

Funding volume: 152 million euros Website: qualifizierungdigital.de

Goal of the measure

Improving and disseminating the use of digital media

in initial and continuing vocational training.

Current state of play

Funding was provided for 52 partnerships running 129 individual projects in 2021; in 2022, funding will be provided for 138 individual projects run by 35 partnerships.

Honouring the best trainees from a migrant background who have completed dual vocational training (Ehrung der besten Absolventinnen/Absolventen einer dualen Ausbildung mit Migrationshintergrund)

Key data

Period: December 2020 to April 2021 Funding volume: 110,000 euros Website: vielfalt-in-der-ausbildung.de

Goal of the measure

Particular acknowledgment of the outstanding achievements of trainees from a migrant background who have completed vocational training, and promoting greater openness on the part of companies providing training and shining a public spotlight on this target group.

Current state of play

Over the entire period of the project, more than 200 candidates applied nationwide, three of whom were selected (by a jury including representatives of the chambers and social and economic partners) and presented with a prize at a high-profile ceremony. Efforts are under way to continue this programme.

Introductory training, section 54a of Book III of the Social Code (Einstiegsqualifizierung)

Key data

Actual expenditure: 28.03 million euros in 2021

(Book III and Book II of the

Social Code)

Website: arbeitsagentur.de

Goal of the measure

Supporting young people with limited prospects of being placed in training, giving them an opportunity to

gain vocational skills, and giving companies that provide training a chance to get to know the young people.

Current state of play

In 2021, around 10,000 young people (3,000 women and 7,000 men) began introductory training.

European Employment Services (EURES)

Key data

Website: arbeitsagentur.de

Goal of the measure

Supporting labour market mobility among workers in EU countries and in Switzerland, Iceland, Liechtenstein, and Norway by providing specific information

and advisory and placement services. Companies also receive support in filling their vacancies.

Current state of play

In 2021, Germany's national EURES network reached around 78,000 workers and around 15,000 employers.

Securing a skilled base: continuing vocational education and training and gender equality – ESF Social Partner Directive (Fachkräfte sichern: weiter bilden und Gleichstellung fördern – ESF-Sozial-partnerrichtlinie)

Key data

Period: 2015-2022

Funding volume: 162 million euros (8.4 million euros in

federal funding and 88 million euros

in ESF funding)

Website: initiative-fachkraefte-sichern.de

Goal of the measure

Supporting the social partners in strengthening participation in continuing education and training and promoting gender equality in companies.

Current state of play

By the end of 2021, 172 projects had been approved in six funding rounds. To date, a total of around 38,400 employees at 4,640 companies have been reached (3,660 of them SMEs).

Skilled Immigration Act (Fachkräfteeinwanderungsgesetz)

Key data

Website: make-it-in-germany.com

Goal of the measure

Establishing clear and transparent regulations governing the residence and immigration of skilled workers from third countries to Germany.

Current state of play

The Skilled Immigration Act entered into force on 1 March 2020.

Skilled labour monitoring (Fachkräftemonitoring)

Key data

Period: 2021-2024

Funding volume: 3.06 million euros Website: bmas.de/fachkraeftemonitoring

Goal of the measure

Development of an evidence base for policy discussions by ensuring that plausible forecasts can be made of trends in skilled labour supply and demand over the next five to 20 years.

Current state of play

Skilled labour monitoring is one of the most important analytical references in the policy discussion about

skilled labour in Germany, and it is the basis for the Federal Government's skilled labour strategy. It shows how many jobs could be lost and created in the coming five to 20 years, and above all in which areas.

Last publication: Mittelfristprognose – Arbeitsmarktdynamik bis 2025 (Medium-term forecast – labour market dynamics over the period to 2025), published in November 2021, and Auswirkungen der Klimaschutzmaßnahmen auf den Arbeitsmarkt bis 2025 (Effects of climate action on the labour market over the period to 2025), as at September 2021, published in December 2021.

The Federal Government's skilled labour strategy (Fachkräftestrategie der Bundesregierung)

Key data

Website: bmas.bund.de

Goal of the measure

Recruiting the necessary skilled workers for transforming the social market economy into a socio-ecological market economy by means of better educational opportunities, targeted continuing education and training, raising labour force participation, and modernising immigration law.

Current state of play

Securing the supply of skilled labour is primarily a task for companies. The Federal Government's skilled labour strategy establishes a supportive framework for this, highlights areas for action, and provides impetus for recruiting and securing a supply of skilled workers for the future. Against the background of the three Ds of structural change (digitalisation, decarbonisation, demographics) and the current crises (the coronavirus pandemic, the war in Ukraine), the Federal Government's skilled labour strategy is currently being updated.

Promoting continuing vocational training (FbW) – the continuing vocational training budget (Förderung der beruflichen Weiterbildung – Weiterbildungsbudget)

Key data

Actual expenditure²⁰⁷ 208: Book III of the Social Code:

1,484.02 million euros in 2021; Book II of the Social Code: 528.29 million euros

in 2021

Website: foerderung-der-beruflichen-weiterbildung.

Goal of the measure

Financial support for the unemployed and employees to enable them to undergo continuing vocational education and training.

Current state of play

In 2021, around 268,000 people (117,000 women and 150,000 men) were provided with funding for continuing vocational training, and in 63,000 cases the training led to a qualification. Wage subsidies for continuing vocational training were also paid for around 27,000 employees.

²⁰⁷ Including spending on rehabilitation measures.

²⁰⁸ The expenditure on individual training funded under Book II of the Social Code is the expenditure of the 302 joint institutions. The figures for the 104 authorised municipal providers are not included and are not available to the Federal Employment Agency.

Funding to improve vocational training at agricultural colleges in Ukraine (Förderung der Berufsausbildung an landwirtschaftlichen Colleges in der Ukraine – FABU)

Key data

Second phase: 1 December 2021 to 31 December 2024 (with a one-year extension option)

Funding volume: up to around 1.42 million euros (if extended: around 1.87 million euros)

Websites: bmel-kooperationsprogramm.de/projekte/ ukraine/foerderung-der-berufsausbildungan-landwirtschaftlichen-colleges-in-derukraine, agrarausbildung-ukraine.net

Goal of the measure

Supporting Ukraine in providing practice-based training at agricultural colleges – modelled on the German dual training system – and in training skilled staff and management personnel in theoretical and

practical skills and abilities, making agricultural training more modern and more closely oriented towards the labour market.

Current state of play

An external evaluation has confirmed that the project has largely achieved its objectives and that its implementation has been highly professional and pragmatic, although the project's approaches are not yet sufficiently established in practice.

The second, three-year follow-up phase will therefore develop elements to consolidate and sustainably establish a coherent, modern training system in agricultural colleges.

Funding of the development and trialling of a master's programme in the field of management and teaching for international training personnel (Förderung der Entwicklung und Erprobung eines Master-Studienprogramms im Bereich Management und Teaching für internationales Berufsbildungspersonal - MasterVET)

Key data

Period: 2019-2024

Funding volume: 1.5 million euros

Website: berufsbildung-international.de/de/Neue-BMBF-Forderrichtlinie-zur-Forderung-eines-Master-Studienganges-Management-

Teaching-1813.html

Goal of the measure

Development of an English-language master's programme for vocational training personnel and/or future skilled and managerial staff from abroad in the field of education and training management.

Current state of play

Since the start of funding in April 2021, key foundations have already been laid for the part-time degree programme for skilled and managerial staff via the BBI@TUM project.

Funding for the development and implementation of international training clusters (Förderung der Entwicklung und Implementierung von Ausbildungsclustern International - ClusterVET)

Key data

Period: 2019-2027

Funding volume: 2 million euros

Website: berufsbildung-international.de/de/Qualifizierung-von-Fachkraften-deutscher-Unternehmen-in-Ausbildungsclustern-im-Aus-

land-1833.html

Goal of the measure

Development and testing of training clusters that will contribute to demand-oriented initial and continuing training of skilled workers from German companies (especially SMEs) working abroad.

Current state of play

Since 2020, the funding regulation has enabled training clusters to be formed with skills development approaches adapted to the needs of the partner country.

Funding and support for young people who are hard to reach, section 16h of Book II of the Social Code (Förderung schwer zu erreichender junger Menschen)

Key data

Actual expenditure: 43.91 million euros in 2021

Goal of the measure

Providing low-threshold counselling and support services, especially psychosocial and outreach services, for young people aged between 15 and 25 who are probably entitled to benefits in the framework of basic income support for jobseekers under Book II of the Social Code, but who are not, or are no longer, being reached by the standard services of the social benefits system.

Current state of play

According to Federal Employment Agency statistics, around 9,000 participants started a measure under section 16h of Book II of the Social Code in 2021. The Institute for Employment Research (IAB) has published a report on their first positive findings at iab-forum.de/einbeziehung-schwer-zu-erreichenderjunger-menschen-in-die-grundsicherung-eine-erfolgsgeschichte.

Funding for implementing projects involving business and social partner organisations in international vocational education and training cooperation (Förderung von Implementierungsprojekten von Organisationen der Wirtschafts- und Sozialpartner im Rahmen der internationalen Berufsbildungszusammenarbeit – WiSoVET)

Key data

Period: 2019-2024

Funding volume: 2 million euros by 2021 Website: berufsbildung-international.de/de/

> Forderung-der-Wirtschafts-und-Sozialpartner-Implementierungsprojekte-im-Rahmen-

der-1814.html

Goal of the measure

Involving chambers and employee representative organisations in shaping the bilateral vocational education and training partnerships of the Federal Ministry of Education and Research.

Current state of play

The involvement of economic and social partners in vocational education and training partnerships with six countries has been developed and trialled in a total of 16 projects. The operational involvement of the chambers and employee representative organisations is supporting the design and implementation of vocational education and training reforms in the partner countries.

Funding for residential homes for young people, sections 80a and 80b of Book III of the Social Code (Förderung von Jugendwohnheimen)

Key data

Actual expenditure: 3.51 million euros in 2021 Website: arbeitsagentur.de

Goal of the measure

Funding the repair and modernisation, and in some cases the construction, of residential homes for young people.

Current state of play

In 2021, three applications for a subsidy for residential homes for young people were lodged. Since 2012, the Federal Employment Agency has received a total of 80 applications for funding and 16 applications have been processed conclusively. 28 applications were withdrawn, and a further 13 applications were rejected or denied. Comprehensive and detailed advice and engagement with everyone involved are fundamental to this very complex process.

Funding and support for young people with disabilities, Book III and Book IX of the Social Code (Förderung von jungen Menschen mit Behinderungen)

Key data

Website: arbeitsagentur.de

Goal of the measure

Supporting the participation of young people with disabilities with both general and rehab-specific benefits in relation to working life, especially in the

context of pre-vocational training and initial vocational training.

Current state of play

Funding and support are being provided to people with disabilities (under Book III and Book IX of the Social Code).

Funding for measures to support adaptation to climate change (Förderung von Maßnahmen zur Anpassung an die Folgen des Klimawandels)

Key data

Period: since 2011

Funding volume: around 9 million euros annually,

roughly 27% of which is for training

modules

Website: bmuv.de/DL1530

Goal of the measure

Development of training modules on adaptation to climate change, including modules for initial and continuing vocational education and training.

Current state of play

In 2021, funding was provided for 29 individual training projects.

Research on the Internationalisation of Vocational Education and Training (Forschung zur Internationalisierung der Berufsbildung)

Key data

Period: 2017-2023

Funding volume: 4.5 million euros by 2021

Website: berufsbildung-international.de/de/foerderungbekanntmachungen-und-ausschreibungenbmbf-bekanntmachung-forschung.html

Goal of the measure

Strengthening institutionalised vocational training research on international cooperation in vocational

education and training in Germany and selected partner countries worldwide.

Current state of play

By the end of 2021, 17 projects had been launched on current issues in the context of cooperation on vocational education and training. German universities and research institutes are working with their partner organisations in 11 different countries on the internationally focused research projects.

Act to Secure Employment (Gesetz zur Beschäftigungssicherung infolge der COVID-19-Pandemie – Beschäftigungssicherungsgesetz)

Key data

Special provision in section 106a of Book III of the Social Code, for a limited period until 31 July 2023 Website: bmas.de/DE/Arbeit/Aus-und-Weiterbildung/

Weiterbildungsrepublik/Foerderung-derberuflichen-Weiterbildung/foerderung-der-beruflichen-weiterbildung.html#doce 4306990-4557-43ed-b8f0-fe7b62cf86aabody Text16

Goal of the measure

Providing a greater incentive for employers and employees to use periods of short-time work for continuing vocational education and training.

Current state of play

Half of social security contributions are reimbursed and, depending on the size of the company, the costs of the continuing education or training course are reimbursed at a flat rate, even beyond the end of the period of short-time work.

Act on the Promotion of Continuing Training in Structural Change and on the Further Development of Training Assistance – Work of Tomorrow Act (Gesetz zur Förderung der beruflichen Weiterbildung im Strukturwandel und zur Weiterentwicklung der Ausbildungsförderung – Arbeit-von-morgen-Gesetz)

Key data

Permanent changes to the legal framework for labour market policy instruments, including in the areas of funding and support for continuing education and training and for vocational training under Book III of the Social Code.

Standard instrument from 1 July 2020. Website: arbeit-von-morgen-gesetz.html

Goal of the measure

Increasing incentives for participation in continuing training, especially for employees facing structural change (by expanding the funding and support framework) and for people with low-level qualifications

(by means of a legal entitlement to funding for continuing training measures leading to vocational qualifications and by extending the continuing education bonus for participants who pass intermediate and final exams), and further developing funding and support for training, in particular by making "Assisted training" (Assistierte Ausbildung) program, a permanent instrument and consolidating it with assistance for trainees during training.

Current state of play

The Act was promulgated on 28 May 2020 and entered into force in stages, mainly by 1 January 2021.

Skills Development Opportunities Act (Gesetz zur Stärkung der Chancen für Qualifizierung und für mehr Schutz in der Arbeitslosenversicherung – Qualifizierungschancengesetz)

Key data

Expanding and improving opportunities for funding for continuing vocational education and training in the framework of employment promotion (Book III of the Social Code) and in the framework of basic income support for jobseekers (Book II of the Social Code). Website: foerderung-der-beruflichen-weiterbildung.

Goal of the measure

Improving the vocational qualifications of people with low-level qualifications and ensuring a supply of skilled workers in occupations experiencing shortages.

Current state of play

The Act has been in force since 1 January 2019.

Act on Good Early Childhood Education and Care (Gesetz zur Weiterentwicklung der Qualität und zur Teilhabe in der Kindertagesbetreuung – Gute-KiTa-Gesetz)

Key data

Period: 2019-2022

html

Funding volume: 5.5 billion euros Website: bmfsfj.de/gute-kita-gesetz

Goal of the measure

Further enhancing the quality of day care for children. Funding is provided for measures by the Länder to improve the vocational education and training and, more generally, the qualifications of skilled staff working in this area.

Current state of play

The Länder are implementing the Land-specific measures in the Act.

Girls'Day

Key data

Period: since 2001

Funding volume: 656,000 euros in 2021

Website: girls-day.de

Goal of the measure

Attracting girls and young women to vocational training or tertiary studies in fields such as IT, science, the skilled trades, and technology.

Current state of play

Around 2 million girls have participated in more than 150,000 activities since the programme started (as at 2019). In 2021, Girls'Day took place mainly in digital form due to the pandemic (1,059 in-person activities with 6,765 places; 2,293 digital activities with 71,864 places).

German Office for International Cooperation in Vocational Education and Training (GOVET) in the Federal Institute for Education and Training (Zentralstelle der Bundesregierung für internationale Berufsbildungskooperation im Bundesinstitut für Berufsbildung)

Key data

Period: Since 2013

Funding volume: 1 million euros annually

Website: govet.international/de

Goal of the measure

Supporting the Federal Government to implement and to develop further its strategies in the field of international cooperation on vocational education and training, answering enquiries from abroad, and developing and disseminating information about the German vocational education and training system.

Current state of play

In 2021, GOVET held a series of workshops with seven partner countries on the effects of COVID-19 on initial and continuing training, with 250 participants; answered around 350 enquiries from 70 countries about German vocational education and training and about cooperation in this field; and provided information about vocational education and training in new online formats and via a website available in eight languages. In addition, GOVET supports selected bilateral vocational education and training partnerships established by the Federal Ministry of Education and Research.

iMOVE – Training Made in Germany

Key data

Period: since 2001

Funding volume: 0.6 million euros annually

Website: imove-germany.de

Goal of the measure

Supporting German education and training providers to tap into international markets.

Current state of play

In the year of the 20th anniversary of its establishment, iMOVE brought out seven publications and participated in virtual information events and delegation trips to nine countries. Together with scientific partners, iMOVE developed a three-part series of workshops about the findings of the research accompanying the funding initiative run by the Federal Ministry of Education and Research.

"The Duale" information campaign

Key data

Period: since 2020

Funding volume: around 3 million euros annually

Website: die-duale.de

Goal of the measure

Informing young people and those advising them about the diverse range of opportunities that dual

vocational training offers.

Current state of play

In 2021, the focus was on testimonial profiles about individual career paths in vocational education and training. This was supplemented by press and media activities, for example, on the topics of "digital occupations" and "advancement opportunities and prospects of vocational education and training".

YOU + your training = practically unbeatable! (DU + Deine Ausbildung = Praktisch unschlagbar!) information campaign

Key data

Period: since 2016

Funding volume: around 6 million euros annually

Website: praktisch-unschlagbar.de

Goal of the measure

Inspiring young people to participate in vocational education and training and to highlight the attractive career and promotion prospects it offers.

Current state of play

In view of the coronavirus pandemic, the information campaign continues to be heavily focused on digital communication. It aims to use social media, in particular, to show young people the advantages of vocational education and training. As well as regular updates, it also includes video content aimed specifically at the target group. The information campaign also played a part in the "Summer of Vocational Training".

Continuing training advice and information hotline (Infotelefon Weiterbildungsberatung)

Key data

Period: since 2015

Funding volume: 500,000 euros annually Website: der-weiterbildungsratgeber.de

Goal of the measure

Supporting people in actively and autonomously determining their educational and occupational careers.

The hotline is an accessible, independent service that is offered free of charge for everyone interested in

continuing education and training and those looking for advice on all issues around individual vocational learning and skills development.

Current state of play

Increasingly, informal (vocational) learning and skills development are covered alongside formal continuing vocational education and training. Around 1,000 calls are received each month, meaning that up to 50 people receive advice from the hotline every day.

Learning support in the workplace: support for workplace continuing training mentors (Lern-prozessbegleitung am Arbeitsplatz: Förderung von betrieblichen Weiterbildungsmentoren) initiative

Key data

Period: 2020-2024

Funding volume: around 11.4 million euros

Goal of the measure

Increasing participation in continuing education and training, particularly in companies and sectors that are most affected by technological change. Workplace or trade union representatives are trained as "continuing training mentors" who identify skills development needs in companies, encourage colleagues and, in

particular, under-represented groups of employees to participate in continuing education and training, advise them on these issues, and match them with continuing education and training activities.

Current state of play

The funding and support projects of the IG Metall, Ver.di, NGG, and IG BCE/BAVC trade unions are currently training workplace representatives as continuing training mentors.

Education Chains initiative (Initiative Bildungsketten)

Key data

Period: Federation-Land agreements for 2021 to 2026 with all 16 Länder

Funding volume: financing via the Vocational Orien-

tation Programme (BOP), Social Code provisions, Federal Employment Agency funding, and Länder funding

Website: bildungsketten.de

Goal of the measure

Enabling young people in managing a seamless transition from school to vocational training and work.

To this end, the various funding instruments at federal level (Federal Ministry of Education and Research, Federal Ministry of Labour and Social Affairs, Federal Employment Agency) and at the level of the Länder have been coordinated and integrated.

Current state of play

For the second phase, running from 2021 to 2026, agreements had been concluded with 13 Länder by the end of 2021. Three further agreements are being negotiated or are close to being concluded.

Cliché Free Initiative (Initiative Klischeefrei)

Key data

Period: since December 2016

Funding volume: 900,347 euros in 2021

Website: klischee-frei.de

Goal of the measure

To inform, network, and educate everyone involved in career orientation processes in order to enable young people to choose a career or a higher education course based on their individual strengths and interests, without being influenced by gender stereotypes.

Current state of play

Almost 430 partner organisations have already joined and are supporting the initiative, including numerous federal ministries, Länder, social partners, education institutions, and companies. The initiative's third conference took place in digital form in 2021, under the leadership of the Federal Ministry of Labour and Social Affairs.

INVITE – innovation competition for digital platforms in continuing vocational training (Innovationswettbewerb Digitale Plattform Berufliche Weiterbildung)

Key data

Period: 2021-2025

Funding volume: around 80 million euros Websites: innovationswett-bewerb-invite/

innovationswettbewerb-invite_node.html,

bibb.de/de/120851.php

Goal of the measure

Establishing an innovative digital continuing vocational training space which enables people to easily

and quickly find continuing education and training programmes that suit their personal needs.

Current state of play

Since 2021, a total of 35 INVITE projects have been funded after winning a competition judged by an independent jury.

InnoVET – Shaping the future – innovations for excellent vocational education and training (Bundeswettbewerb "InnoVET – Zukunft gestalten – Innovationen für eine exzellente berufliche Bildung") federal competition

Key data

Period: 2019-2024

Funding volume: around 80 million euros

Website: inno-vet.de

Goal of the measureIncreasing the attractiveness and quality of vocational

training and its parity with academic education.

Current state of play

After a conceptual phase, regional and sector-specific stakeholders in 17 selected project networks have been developing and trialling innovative and sustainable programmes of initial and continuing training. The projects were selected via a competitive process judged by an independent jury.

New Quality of Work Initiative network office (INQA-Netzwerkbüro)

Key data

Period: 1 December 2020 to 30 November 2024

Website: inqa.de

Goal of the measure

Supporting networks by providing a wide range of practical expertise on professional networking and

national networking around the topic of securing a supply of skilled labour and high-quality work.

Current state of play

Around 300 networks are currently listed with the New Quality of Work Initiative network office.

Network "Integration through Qualification (IQ)" (Netzwerk Integration durch Qualifizierung)

Key data

Period: 2014-2022

Funding volume: 297.3 million euros in total

expenditure for 2019-2022

Website: netzwerk-iq.de

Goal of the measure

Sustainable vocational integration of people from

a migrant background.

Current state of play

Nationwide, there are 72 counselling centres and more than 100 mobile counselling units for people with foreign qualifications seeking advice. From January 2019 to December 2021, around 296,000 counselling sessions took place on the recognition of foreign professional qualifications or on the topic of skills development.

Federal ESF Integration Directive ((ESF-)Integrationsrichtlinie Bund)

Key data

Period: 2015-2022

Funding volume: 337.7 million euros

(116.2 million euros in federal funding and 187.5 million euros in

ESF funding)

Website: esf.de/portal/DE/ESF-2014-2020/ Foerderprogramme/bmas/esfintegrationsrichtlinie-bund.html

Goal of the measure

Incremental and sustainable integration of people with particular difficulties into employment and training, especially adolescents and young adults aged between 18 and 35. There are three priority areas for action: "Integration through exchange" (IdA), which offers transnational mobility measures; "Integration, not exclusion" (IsA); and "Integration of asylum seekers and refugees" (IvAF).

Current state of play

Since the programme began, the following has been achieved in the three priority areas for action:

IdA: recorded 4,209 participants by March 2022, 74% of them under the age of 27; by March 2022, around 3,600 of these participants had been sent to another European country on an exchange trip. The labour market integration rate was around 55%. The programme also hosted around 662 young people from other European countries; the projects are running until June 2022 at the latest.

IsA: recorded around 14,678 participants by December 2020, 66% of them under the age of 27. The integration rate was 52%. The projects ended on 31 December 2020.

IvAF: recorded around 74,900 asylum applicants and refugees by April 2022. The integration rate was 35 %. The projects were extended until September 2022.

Internationalising vocational training (Internationalisierung der Berufsbildung – IBB)

Key data

Period: 2017-2022

Funding volume: 23 million euros by 2021 Website: berufsbildung-international.de/de/ foerderung-bekanntmachungen-undausschreibungen-bmbf-bekanntmachung.

html

Goal of the measure

Providing demand-oriented development of initial and continuing training services for international markets,

and contributing to the reform of vocational training in partner countries with which the Federal Ministry of Education and Research has a vocational education and training partnership.

Current state of play

By the end of 2021, funding and support had been provided for a total of 75 projects in 20 countries. Many of these projects support the vocational training reforms in the other country or market entry for German education and training providers.

Investing in building, equipping and modernising inter-company vocational training centres and developing them into centres of excellence (Investitionen in Bau, Ausstattung und Modernisierung überbetrieblicher Berufsbildungsstätten und ihre Weiterentwicklung zu Kompetenzzentren)

Key data

Period: unlimited; began in the 1970s

Funding volume: 83 million euros in federal funding

in 2021 (plus co-financing from the

Länder and the centres)

Websites: bmbf.de/übs, bafa.de/uebs

Goal of the measure

Supporting inter-company vocational training centres in the process of adapting to dynamic education and

training policy changes, as well as social and technical change.

Current state of play

In 2021, support was provided for 151 projects (including 36 in the area of digitalisation via the Federal Office for Economic Affairs and Export Control – BAFA) to further strengthen the national network of centres and modernise centres to meet current demands.

JOBSTARTER plus - vocational training for the future (JOBSTARTER plus - Für die Zukunft ausbilden)

Key data

Period: 2014-2022

Funding volume: 42.2 million euros in federal funding

and 58.2 million euros in ESF funding

Website: jobstarter.de

Goal of the measure

Supporting small and medium-sized companies in the area of vocational education and training. The main

focus is on digitalising vocational training and securing commitments from small companies and microenterprises to engage in vocational training.

Current state of play

In 2021, 11.2 million euros of funding was provided for 70 projects to achieve these goals.

JOBSTARTER Transfer

Key data

Period: 2021-2023

Funding volume: around 2.9 million euros

Website: jobstarter.de

Goal of the measure

Transferring approaches that have successfully been trialled in relation to securing commitments from small companies and micro-enterprises to engage in vocational training to other regions or other sectors.

Current state of play

From mid-2021 to the start of 2022, a total of 11 (collaborative) projects were launched. These projects have been undergoing evaluation since the end of 2021, together with the Coordinating Office Vocational Training and Migration (KAUSA) transfer projects running in parallel. At the end of the evaluation, the conditions for successful transfer will be summarised in a guide.

Youth Migration Services (Jugendmigrationsdienste – JMD)

Key data

Period: continuous

Funding volume: 60.85 million euros in 2021 Website: jugendmigrations-dienste.de

Goal of the measure

Providing counselling and individual mentoring for young people from a migrant background in terms of their school, occupational, social, and language-rela-

ted integration, focusing on the transition from school to work.

Current state of play

In 2021, roughly 110,000 young migrants were supported by around 500 youth migration services.

Coordinating Office Vocational Training and Migration (Koordinierungsstelle Ausbildung und Migration – KAUSA)

Key data

Period: 2017-2024

Funding volume: 23 million euros (4.8 million euros in

2020; 5.5 million euros in 2021; around 3.1 million euros in 2022) Website: bildungsketten.de/de/kausa-projekte.html

Goal of the measure

Supporting young people from a migrant background in the transition from school to work, and encouraging self-employed people from a migrant background to engage in dual vocational training.

Current state of play

The new Federation-Länder agreements on the Education Chains initiative, which entered into force in 2021, have consolidated the KAUSA activities in this framework. In line with the strategies in the individual Länder, the existing KAUSA service offices are being developed into Land offices. The first Land offices have taken up their work in Brandenburg, Lower Saxony, Mecklenburg-Western Pomerania, Rhineland-Palatinate, Saxony-Anhalt, and Thuringia.

Coordinating Office Vocational Training and Migration – Transfer (KAUSA Transfer)

Key data

Period: 2022-2023

Funding volume: 1.9 million euros

Website: bildungsketten.de/de/kausa-projekte.html

Goal of the measure

Covering the results of past KAUSA activities over the long term and applying them in other regions and

sectors, as well as for other target groups.

Current state of play

KAUSA transfer projects are being funded in line with the funding guideline published on 22 April 2021. The projects will begin in 2022.

Centre of Excellence for Securing the Supply of Skilled Labour (Kompetenzzentrum Fachkräftesicherung – KOFA)

Key data

Period: 1 January 2021 to 30 June 2023

Funding volume: around 5.91 million euros (net)

Website: kofa.de

Goal of the measure

Supporting SMEs, in particular, in recruiting and securing a supply of skilled workers.

Current state of play

Ongoing expansion of the website with information and advisory services.

Cooperative models for ensuring sustainable integration into the training and labour market (Kooperationsmodelle zur nachhaltigen Integration in den Ausbildungs- und Arbeitsmarkt)

Key data

Website: arbeitsagentur.de

Goal of the measure

Integration of systematic language learning, a quick start in employment subject to social security contributions, and vocational training or continuing vocational training. The cooperative models aim to enable participants to gain a recognised vocational qualification in the medium term (Step by Step: vocational training; "Kommit": continuing training leading to a qualification through reskilling, partial qualifications, and measures to prepare participants for external exams).

Website for vocational education and training (Portal berufliche Bildung) cross-Länder initiative in the Digital Pact for Schools

Key data

Period: 2021-2024

Funding volume: 3.9 million euros

Website: pbb.schule

Goal of the measure

Providing a platform for teachers at vocational schools to share digital media. Collaboration between Länder will produce synergies as a result of joint, binding framework curricula for the sector of vocational education and training while simultaneously increasing specialisation in training occupations.

Current state of play

All teachers at vocational schools in Germany (roughly 150,000 teachers in the 2020/2021 school year) and all students at vocational schools (around 2.3 million in 2020/2021²⁰⁹).

²⁰⁹ Federal Statistical Office figures for the 2020/2021 school year, including teachers employed full-time, part-time, or on an hourly basis, and students at all forms of vocational school.

Networked future labs at vocational schools (Vernetzte Zukunftslabore an den Berufsbildenden Schulen) cross-Länder initiative

Key data

Period: 2022-2025

Funding volume: 1.5 million euros Website: still under development

Goal of the measure

Strengthening vocational education and training in rural areas through a pilot and transfer project, by enabling vocational schools to engage in digital product development and marketing together with company training personnel and universities of applied

sciences in networked and sometimes virtual work environments, and by doing so, supporting regional SMEs at the borders between Länder, in particular, with regard to digitalisation.

Current state of play

Teachers and students at vocational schools and staff responsible for vocational training at SMEs in Lower Saxony and North Rhine-Westphalia and other neighbouring Länder.

Lifelong vocational guidance (Lebensbegleitende Berufsberatung - LBB)

Key data

Strengthening the vocational guidance provided by the Federal Employment Agency.

Goal of the measure

Provision of high-quality guidance, offering career orientation before people enter working life and for people in working life, for example, when people are returning to work or changing career.

Current state of play

With career orientation before entering working life having been introduced at general and vocational schools, it is now being introduced for people who are not school students and at higher education institutions in 2021/2022.

Since January 2020, career orientation for people in working life has been introduced nationwide with the development of 39 networks, with around 113,000 guidance sessions being carried out by the end of December 2021.

Measures to support employee representatives to serve on exam boards and vocational training committees under sections 39, 56, and 77 of the Vocational Training Act or sections 33, 42h, and 43 of the Crafts Code (Maßnahmen zur Betreuung von Arbeitnehmervertreterinnen und -vertretern in Prüfungs- bzw. Berufsbildungsausschüssen)

Key data

Period: 2021-2023

Funding volume: around 1.2 million euros
Website: bmbf.de/bmbf/de/bildung/beruflichebildung/foerderinitiativen-und-programur-staerkung-der-berufsbildung/
qualifizierungsmassnahme-fuer--fungs-und-

nahme-fuer--fungsund-bildungsausschuessen.html

bildungsausschuessen/qualifizierungsmass-

Goal of the measure

To recruit, network, and support employee representatives to serve on exam boards and vocational training committees.

Current state of play

Since 2021, funding has been provided for three projects. In 2021, they expanded information services about voluntary service on exam boards and initiatives to recruit new examiners, strengthened panels of consultants and networks, and held regional events to show appreciation for voluntary service on exam boards.

Measures to train employee representatives to serve on examination boards and vocational training committees under sections 39, 56, and 77 of the Vocational Training Act and sections 33, 42h, and 43 of the Crafts Code (Maßnahmen zur Qualifizierung von Arbeitnehmervertreterinnen und -vertretern in Prüfungs- und Berufsbildungsausschüssen)

Key data

Period: 2021

Funding volume: around 700,000 euros

Website: bmbf.de/bmbf/de/bildung/beruflichebildung/foerderinitiativen-und-programur-staerkung-der-berufsbildung/ qualifizierungsmassnahme-fuer--fungs-

> und-bildungsausschuessen/ qualifizierungsmassnahme-fuer--fungs-

und-bildungsausschuessen.html

Goal of the measure

Training for employee representatives so they are qualified to serve on exam boards and vocational training committees.

Current state of play

Six projects were funded in 2021. They organised a diverse range of measures nationwide, with both in-person and online formats, to ensure that employee representatives are qualified for future and current roles on exam boards and vocational training committees.

Migration advisory service for adult immigrants (Migrationsberatung für erwachsene Zuwanderer – MBE)

Key data

Period: ongoing since 2005

Funding volume: 70.9 million euros in 2021

Website: bmi.bund.de/DE/themen/heimat-integration/

integration/migrationsberatung/migrationsberatung-node.html

Goal of the measure

Providing counselling, individual mentoring, and support for adult migrants aged 27 and upwards, including with regard to finding work or vocational training.

Current state of play

In 2020, around 305,000 cases involving roughly 530,000 people seeking advice were registered with around 1,500 advisory centres nationwide.

Modernising training and advanced training regulations (Modernisierung von Aus- und Fortbildungsordnungen)

Key data

Ongoing

Goal of the measure

Continuous adaption of training and advanced training regulations to reflect the dynamically changing demands of the world of work.

Current state of play

Within the area of responsibility of the Federal Ministry of Education and Research, three advanced training regulations were modernised in substantive terms in 2021, in addition to the introduction of new qualification titles; these regulations will enter into force at the start of 2022.

In the 2021 training year, one new and seven modernised training regulations entered into force on 1 August; the modernisation of a further 14 occupations was completed, with the aim that the new regulations will enter into force in 2022; and 27 procedures to develop new training regulations and modernise existing ones were continued or begun.

National decade for literacy and basic skills (Nationale Dekade für Alphabetisierung und Grundbildung)

Key data

Period: 2016-2026

Funding volume: around 180 million euros

Website: alphadekade.de

Goal of the measure

Achieving a lasting improvement in the level of literacy and basic skills of adults in Germany by increasing participation in continuing education and training.

Current state of play

Since July 2021, nine three-year development projects on work-oriented literacy and basic skills have been financed with a total volume of 23 million euros.

National online continuing education and training platform (NOW!) (Nationale Online-Weiterbildungsplattform – NOW!)

Goal of the measure

The development and provision of a central continuing education and training platform, which provides transparent information about existing continuing education and training opportunities and services, supports users in tapping into opportunities for professional development and skills development, and in this way makes a significant contribution to increasing the rate of participation in continuing education and training in Germany.

Current state of play

In an eight-month project definition phase, the Federal Employment Agency has developed a rough concept for a national online continuing education and training platform. On this basis, the Board of Directors will take a final decision on whether the Federal Employment Agency will develop a platform of this kind.

National Skills Strategy (NWS) (Nationale Weiterbildungsstrategie – NWS)

Key data

Period: ongoing since 2019

Websites: bmbf.de/bmbf/de/bildung/weiterbildung/nationale-weiterbildungsstrategie.html, bmas.de/DE/Arbeit/Aus-und-Weiterbildung/Weiterbildungsrepublik/Nationale-Weiterbildungsstrategie/nationale-weiterbildungsstrategie.html

Goal of the measure

Working together with all relevant partners to strengthen continuing education and training in Germany in order to seize the opportunities offered by economic and societal transformation and to shape structural change.

Current state of play

National Skills Strategy partners have agreed on concrete contributions and measures as part of a long-term dialogue process which spans all sectors and is supported by the social partners.

The report on implementation of the National Skills Strategy was published in June 2021. It documents what has been achieved and outlines areas for action to further enhance the continuing education and training landscape in Germany. The National Skills Strategy is to be systematically continued and updated.

Network for a green world of work (Netzwerk Grüne Arbeitswelt)

Key data

Period: October 2017 to April 2021 Funding volume: 1 million euros Website: gruene-arbeitswelt.de

Goal of the measure

Establishing sustainable development as a factor in career orientation.

Current state of play

The "Network for a green world of work" collects career orientation materials nationwide and makes them available on a website. It also highlights diverse career options to young people.

National Climate Initiative: energy storage for teaching and learning (NKI Energiespeicher fürs Lehren und Lernen)

Key data

Period: September 2021 to August 2024 Funding volume: 416,839 euros

Goal of the measure

The development of various types of redox flow battery systems and demonstrators for teaching at higher education institutions.

Supporting SMEs in filling training places (Passgenaue Besetzung)

Key data

Period: 2015-2023

Funding volume: around 3 million euros annually,

plus ESF funding

Website: bmwi.de/passgenaue-besetzung

Goal of the measure

Supporting small and medium-sized companies (SMEs) in finding suitable German and non-German young people to fill their vacant training places.

Current state of play

In 2021, around 6,250 SMEs were advised as part of the "Perfect fit for the Job" programme, with around 3,100 training places and roughly 260 introductory training places being filled.

Around 130 advisers (full-time equivalent) were working at 83 chambers and business organisations across Germany in 2021.

Website for training personnel (Portal für Ausbilderinnen und Ausbilder)

Key data

Period: 1 June 2021 to 31 May 2025 Funding volume: around 19.7 million euros

Goal of the measure

The development of a national central point of contact online for training personnel which offers high-quality digital training services for attractive and forward-looking vocational training.

Current state of play

With the involvement of the target group and stakeholders, the conceptual development process began in 2021 with needs analysis and the definition of substantive and technical goals.

ProTandem

Key data

Period: since 1980

Funding volume: 2 million euros annually

Website: pro.tandem.org

Goal of the measure

Supporting Franco-German vocational education and training exchanges for young people and adults.

Current state of play

A total of 14 group exchanges between Germany and France began in 2021, in which around 400 participants from 10 occupational fields took part. Three of them took place entirely online. After a long developmental phase, the first hybrid-format exchange took place in the last quarter. The programme has reached around 108,500 participants in total since it was founded.

Qualification initiative for digital transformation – Q 4.0 (Qualifizierungsinitiative Digitaler Wandel – Q 4.0)

Key data

Period: 1 October 2019 to 31 December 2022 Funding volume: around 30 million euros Website: www.bildung-forschung.digital/

digitalezukunft/de/bildung/aus-und-weiterbildung/qualifizierungsinitiative-digitaler-wandel-q-4-0/qualifizierungsinitiative-digitaler-wandel-q-4-0_node.html

Goal of the measure

Developing and trialling innovative continuing education and training formats for vocational training personnel in the context of digital transformation.

Current state of play

In 2021, around 50 cross-sectoral, sector-specific, and occupation-specific skills development formats were developed and trialled to promote media literacy and technical and social skills so that content and processes in dual vocational training can be shaped appropriately in the context of digital transformation.

Resource competence for the use of raw materials in global value chains: an exemplary analysis using the example of the study programmes in design and engineering science (Ressourcenkompetenz für Rohstoffnutzung in globalen Wertschöpfungsketten – Eine exemplarische Analyse am Beispiel von Studiengängen im Bereich Design und Ingenieurwissenschaften)

Key data

Period: October 2020 to March 2023 Funding volume: 325,319 euros

Goal of the measure

The further development of resource competence in selected study programmes in design and engineering sciences in terms of new approaches.

Current state of play

The first results of RessKoRo are available, and regular reports on the results have been provided at project meetings. Expert workshops have also taken place, and a larger conference is scheduled to be held on 19 September 2022 for discussion and presentation of the results.

Tailwind – for employees in the social economy (rückenwind – Für die Beschäftigten in der Sozialwirtschaft)

Key data

Period: 2015-2022

Funding volume: 104 million euros (2.5 million euros

in federal funding and

53.5 million euros in ESF funding)

Website: bagfw-esf.de/aktuelles

Goal of the measure

Promoting and maintaining the employability of employees in the social economy.

Current state of play

By the end of 2021, a total of 148 projects had been initiated in six calls for funding. 30,430 employees at roughly 2,080 companies in the non-profit social economy have been reached to date.

SCHULEWIRTSCHAFT prize "That has potential!" (SCHULEWIRTSCHAFT-Preis "Das hat Potential!")

Key data

Current award period: 2022-2023

Funding volume: around 210,000 euros annually

Website: bmwi.de/schulewirtschaft

Goal of the measure

Honouring the engagement of companies, schools, and publishers working at the intersection between school and work, and providing incentives for innovative projects in the areas of vocational orientation and economics education.

Current state of play

In 2021, 65 entries were submitted in four competition categories (SCHULEWIRTSCHAFT: companies; SCHULEWIRTSCHAFT: starters; SCHULEWIRT-SCHAFT: digital education; teaching and learning media for economics education), 18 of which were awarded prizes.

The prize award ceremony took place on 3 December 2021 and can be accessed at schulewirtschaft.de/preis.

Special funding programme to support investment in digital equipment and modernisation of training courses at inter-company vocational training centres (Sonderprogramm ÜBS-Digitalisierung für Investitionen in digitale Ausstattung und die Modernisierung von Ausbildungskursen in Überbetrieblichen Berufsbildungsstätten)

Key data

Period: 2016-2023

Funding volume: 30 million euros annually

Website: bmbf.de/übs

Goal of the measure

Accelerating the digitalisation of the vocational training of skilled workers at inter-company vocational training centres.

Current state of play

In phase I, more than 39,000 items of digital equipment were provided for over 200 inter-company vocational training centres, and eight pilot projects were funded for modernising training courses. The current second phase of this special programme will continue until 2023 and has been expanded to incorporate new funding opportunities. In 2021, another 60 projects were approved, and five projects (three of them collaborative projects) were authorised to develop and trial modern forms of practice-based training.

Developing transparent partial qualifications for adults without vocational qualifications (Teilqualifikationen zur Nachqualifizierung transparent gestalten und entwickeln)

Key data

Period: 2017-2022

Websites: bmbf.de/bmbf/de/bildung/berufliche-bildung/rahmenbedingungen-und-gesetzliche-grundlagen/anschluss-mit-abschluss-durch--sbausteine-teilqualifikationen/anschluss-mit-abschluss-durch--sbausteine-teilqualifikationen.html,

teilqualifikation.dihk.de, etapp-teilqualifizierung.de, bibb.de/dienst/dapro/de/index_dapro.php/ detail/7.8.179

Goal of the measure

Creating opportunities for people to build on their pre-existing vocational skills, knowledge, and abilities

and enabling them to gain comprehensive vocational skills, including the option of recognised vocational qualifications, in transparently structured steps. The Federal Ministry of Education and Research provides funding and support for three projects dealing with different aspects of partial qualifications ("Seize the opportunities", ETAPP, BIBB-TQ) in the context of the National Skills Strategy.

Current state of play

During the reporting year, work continued on developing and standardising new partial qualifications, with a focus on creating consistent structures and improving the availability of data. Intersections with other training instruments to enable adults without vocational qualifications to gain qualifications are also being examined.

"Roadshow online" transfer workshops as part of the "Digital media in vocational education and training" programme (Transferworkshops "Roadshow Online" im Rahmen des Programms Digitale Medien in der beruflichen Bildung)

Key data

Period: 2016-2022

Funding volume: 1.5 million euros Website: qualifizierungdigital.de

Goal of the measure

Presenting ideas and developments from the programme and enabling training staff to try them in workshops. Since 2020, the roadshow has been held in an online format due to the pandemic, usually enabling participants to find out about projects, but increasingly

often also allowing them to try them out individually.

Current state of play

At the 22 in-person events held nationwide to date, more than 1,100 training personnel made use of the services on offer. Due to the pandemic, a total of 15 online events were held in 2021 with roughly 700 participants. Around 10 digital and three in-person events are planned for 2022.

Inter-company vocational training centres in the skilled trades (Überbetriebliche Lehrlingsunterweisung – ÜLU)

Key data

Period: Until 31 December 2024

Funding volume: around 58.5 million euros in 2021 Website: bmwk.de/Redaktion/DE/Textsammlungen/

Mittelstand/handwerk.html

Goal of the measure

Enhancing and maintaining the willingness and ability of skilled trades companies to provide training by systematically deepening specialised vocational

training at independent workshops; to adapt vocational training to reflect technological and economic developments; and to ensure consistently high levels of training in the skilled trades, irrespective of the individual company's ability to provide training or specialisation.

Current state of play

In 2021, support and funding were provided for around 56,000 courses with roughly 444,000 participants.

Establishing new qualification titles (Umsetzung neuer Abschlussbezeichnungen)

Key data

Since 1 January 2020

Goal of the measure

Establishing new qualification titles for the advanced training qualifications of "Certified Specialist", "Bachelor Professional" and "Master Professional" established in the Vocational Training Act (Berufsbildungsgesetz).

Current state of play

Within the area of responsibility of the Federal Ministry of Education and Research, six advanced training regulations were revised at the suggestion of the social partners in 2021. They will enter into force at the start of 2022.

Establishing competence centres to carry out processes for dual training occupations – Valikom Transfer (Aufbau von Kompetenzzentren zur Durchführng von Validierungsverfahren für duale Berufe – ValiKom-Transfer)

Key data

Period: November 2018 to October 2024 Funding volume: around 20 million euros Website: validierungsverfahren.de/startseite

Goal of the measure

Assessing and certifying the non-formally and informally acquired vocational skills of people without

formal vocational qualifications that will help them to find employment.

Current state of play

By the end of December 2021, a total of 1,248 validation processes had been carried out in more than 30 occupations by the 32 chambers now participating in the project. 34% of participants were women, while 66% were men.

Prevention of training dropouts (Verhinderung von Ausbildungsabbrüchen - VerA)

Key data

Period: Since 2008

Funding volume: 3.8 million euros annually

Website: vera.ses-bonn.de

Goal of the measure

The deployment of volunteer senior experts to mentor trainees who need special support.

Current state of play

Since 2008, volunteer senior experts have provided more than 18,444 trainees across Germany with additional support and mentoring.

Mandatory pilot projects on the transfer of doctors' activities to general nurses (Verpflichtende Durchführung von Modellvorhaben zur Übertragung ärztlicher Tätigkeiten auf Pflegefachpersonen)

Key data

Period: starting no later than 1 January 2023

Goal of the measure

Increasing the attractiveness of nursing and care training.

Current state of play

Statutory provision in section 64d of Book V of the Social Code; details will be defined in a framework

agreement by the central organisations under section 132a (1), first sentence, of Book V of the Social Code and the National Association of Statutory Health Insurance Physicians by 31 March 2022; the pilot projects will subsequently be carried out by the Land associations of the health insurance funds and substitute funds. The projects will begin no later than 1 January 2023.

Integrated orientation services for vocational training and academic education (Verzahnte Orientierungsangebote zur beruflichen und akademischen Ausbildung – VerOnika)

Key data

Period: since November 2019

Funding volume: around 1 million euros annually

Website: veronika-verbund.de

Goal of the measure

The development and testing of orientation services at the intersection between vocational training and academic education.

Current state of play

The collaborative project is being jointly developed, trialled, and scientifically supported in three Länder – Baden-Württemberg, Berlin, and Hesse – by stakeholders in vocational training and academic education, for subjects ranging from engineering to social work. The services differ from region to region, but they are based on joint quality standards.

Touring exhibition (Wanderausstellung)

Key data

Part of the Competence Center for Resource Efficiency (Kompetenzzentrum für Ressourceneffizienz) project Period: 1 June 2019 to 31 December 2024

Funding volume: 26,550 euros

Goal of the measure

Providing students at various types of schools with information on the subject of resource conservation and the efficient use of resources.

Current state of play

The game-based learning station has been produced and has already been used several times, including by trainees at the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection in November 2021.

Upskilling grant (Weiterbildungsstipendium)

Key data

Period: Since 1991

Funding volume: 31.9 million euros in 2021

Website: sbb-stipendien.de/weiterbildungsstipendium

Goal of the measure

Supporting young people who have had particular success in completing their vocational training

during the process of gaining further vocational qualifications.

Current state of play

Every year, grants are awarded to some 6,000 new recipients. More than 157,800 upskilling grants have been awarded since the programme started.

Welcome mentors (Willkommenslotsen)

Key data

Period: 2016-2023

Funding volume: around 5 million euros annually

(planned expenditure)

Website: bmwi.de/willkommenslotsen

Goal of the measure

Supporting companies in the process of integrating refugees into the workplace, as a means of securing a supply of skilled workers. At the same time, the programme is contributing to the broader social task of integrating refugees into the German labour market.

Current state of play

In 2021, welcome mentors provided individual counselling to around 2,600 companies and succeeded in placing refugees in around 920 training places. In addition, around 200 refugees were placed in introductory training and roughly 210 were placed in employment.

In 2021, around 78 mentors (full-time equivalent) were working at more than 80 chambers and business organisations across Germany.

YouCodeGirls

Key data

Period: July 2020 to June 2023

Funding volume: 2.98 million euros from 2020 to 2023

Website: youcodegirls.de

Goal of the measure

Sustainable inspiration of a "sincere interest" in programming, independent of stereotypes, in girls and young women in order to strengthen this discovered

potential and to channel it into professional activities in this field.

Current state of play

In 2021, the focus was on designing the basic model and the prototype of an interactive online platform with AI mentoring and with a teaching strategy based on gender research. The release of the online platform is planned for 2022.

Central advisory service for the recognition of professional qualifications (Zentrale Servicestelle Berufsanerkennung)

Key data

Period: 2020-2023

Funding volume: 3.5 million euros annually Websites: anerkennung-in-deutschland.de, make-it-in-germany.com/de

Goal of the measure

Supporting skilled workers abroad in having their professional qualifications recognised in Germany.

Current state of play

Between February 2020 and the end of 2021, more than 6,500 people interested in having their professional qualifications recognised were advised and supported.

4 Opinion of the BIBB Board on the draft Report on Vocational Education and Training 2022

4.1 Joint opinion of the groups of employer, employee, and Länder representatives

We would like to thank the Federal Ministry of Education and Research and the Federal Institute for Vocational Education and Training (BIBB) for this comprehensive and informative report. It provides a good overview of the current situation in vocational education and training while also supplying a wealth of background information for detailed analyses.

For the most part, in the past year of the pandemic, initial and continuing training has again been able to take place and vocational training exams have been able to go ahead in spite of all of the difficulties. Despite all the challenges they faced, vocational schools, companies providing training, and the regulating entities have, together with trainees, managed to bring vocational training to a successful conclusion for trainees completing their training. Our sincere thanks goes to all volunteer examiners, training personnel, and teachers.

The training market situation still remains challenging after two years of coronavirus restrictions. The risk of a downward spiral in terms of new training contracts has not been eliminated. The number of newly concluded training contracts remains well below the pre-crisis level despite rising by 1.2%. There is a danger that, similar to what we saw after the financial crisis, the training market will not recover fully. This would have serious negative repercussions for the life chances of a great many young people and for companies' ability to secure the skilled workers they need.

It is still too early to draw final conclusions about the impacts of the coronavirus restrictions on the premature contract termination rate and the pass rate in final exams on the basis of data that is comparable with the previous year's figures, as the reporting period does not yet cover the situation in 2021. Many trainees' only experience of much of their training will have been in the conditions of the coronavirus pandemic. Services such as exam preparation courses will therefore remain necessary for an extended period. To ensure the long-term recovery of vocational training, commitments to provide training must be secured from more companies, and more applicants must be encouraged to apply for training places. The decline in the percentage of companies providing training and the significant fall in applicant numbers are important signals for future developments. The matching of supply and demand must also be improved further in order to tackle the shortage of skilled labour. To this end, career orientation must be strengthened, and needs-based support must be provided to help people make the transition into vocational training. Our aim is to fill all available training places and to place all interested applicants in vocational training.

All stakeholders in vocational education and training must therefore continue, further develop, and effectively expand their efforts relating to the school-towork transition and to enhance the attractiveness of vocational education and training.

4.2 Opinion of the group of employer representatives

The employer representatives on the Board of the Federal Institute for Vocational Education (BIBB) would like to thank the Federal Ministry of Education and Research and the BIBB for the comprehensive, detailed, and balanced Report on Vocational Education and Training 2022.

For the second year in a row, the coronavirus pandemic has had a huge impact on vocational education and training, affecting areas ranging from career orientation, to vocational training, to continuing vocational education and training. Given the major challenges the system has faced, the results achieved should certainly be seen as a success. The vocational education and training system continues to prove itself to be robust and resilient.

Career orientation once again suffered from the fact that little in the way of in-person contact was possible. This affected the information and advisory services offered by, for example, the Federal Employment Agency; at the same time, it meant that companies providing training and applicants had fewer opportunities than normal to get to know each other. Trainee "speed dating" or work experience placements could only take place to a limited extent, in full compliance with all hygiene measures. Both companies providing training and young people were operating in an uncertain environment. Companies lacked economic planning certainty, which is a key prerequisite for engaging in vocational training. Some applicants had doubts about whether vocational training was the right route into work. Many school leavers opted to stay in the school system in order to obtain a higherlevel school-leaving certificate or to begin tertiary studies. Despite the uncertain circumstances, 473,100 new training contracts were concluded in 2021, 1.2 % more than in the previous year. True, across all sectors of the economy, that is 9.9% lower than the pre-pandemic level in 2019. Nonetheless, the professional services sector and the agricultural sector outperformed 2019 in terms of the number of newly concluded training contracts.

The pandemic's implications also kept training programmes from following their usual course. Some sectors provided training even though the lockdowns had brought them to a near complete standstill. Other sectors were also significantly hampered by social distancing and provided training outside of normal work settings. Vocational schools suffered closures. In addition, trainees were forced to switch to remote learning periodically - particularly as a result of quarantine or self-isolation. Despite the extremely difficult circumstances, good results were achieved. The premature training contract termination rate was lower than in the previous year. The immense dedication of training and teaching staff in companies and schools has paid off. Nonetheless, there are grounds for concern that learning deficits as a result of school closures during the pandemic could have an impact on training success in the coming years. Against this background, it is essential to continue to provide needs-based support measures and funding for exam preparation courses.

In the continuing education and training sector, the effects of the pandemic were felt in the form of the cancellation of in-person courses. While many courses were able to be held online, others had to be cancelled entirely.

Thanks to the personal dedication of all involved, exams were able to go ahead in both initial and continuing training, subject to strict hygiene measures. The pass rates were roughly in line with the prepandemic figures.

The outbreak of the coronavirus pandemic in the spring of 2020 left employers in an unprecedented position and confronted them with huge, and in some cases existential, challenges. At an early stage, ways were found to mitigate the economic consequences with support from policymakers and the public administration. However, the supply of skilled labour remains a bottleneck. Employers invest in securing the skilled and managerial staff they need in their own interests. This is also shown by the consistently high level of participation in vocational training, with 78% of companies authorised to provide training doing so continuously or at intervals. The number of training places available also rose to 536,200 in 2021, an increase of 1.7% compared to the previous year. Around half of the training places on offer were available to school leavers with a secondary general school certificate, who now make up just 17% of applicants. Nonetheless, more than 63,000 training places remained unfilled at the end of the vocational guidance year, a rise of 5.4% compared to the previous year. The placement efforts by employment agencies and jobcentres after 30 September are becoming increasingly important. Unlike in the previous year, registered training places outnumbered registered applicants in the subsequent "fifth quarter". In mathematical terms, 117.9 training places were available for every 100 people seeking training. The number of unplaced applicants was reduced further in the course of subsequent placement efforts, and yet many training places remained unfilled.

In the coming year, it is once again essential to work together to stabilise vocational education and training. The war in Ukraine and its consequences are resulting in additional challenges. If all stakeholders with responsibility for vocational training play their part in achieving our shared goal, the fall in trainee numbers

as a result of the pandemic can be halted and reversed. The increase in the number of new training contracts in 2021 compared to the previous year marks a turning point on which we can build. Ways of increasing the number of training contracts include career orientation that is free of stereotypes, further outreach to girls/young women, and efforts to persuade applicants from a migrant background to embark on dual vocational training. It represents an established path into working life, facilitates resilient employment, and offers access to attractive career options.

4.3 Opinion of the group of employee representatives

The training market situation does not offer any grounds to breathe a sigh of relief. The slight recovery in the number of newly concluded training contracts must not be allowed to mask the deeper-rooted structural challenges. The dual training system plays a key role in ensuring equal opportunities in the education system, and it offers, through well-trained skilled workers, the basis for companies' activities. The figures in the Report on Vocational Education and Training show that the system is still falling short when it comes to achieving these two goals.

Focusing on the number of unfilled training places obscures the training market's real challenges. While there are 63,000 unfilled training places, there are also 68,000 young people who still want to be placed in training and are seeking a training place. In addition, there are 20,000 former applicants who are no longer seeking to be placed in training and are registered as jobseekers instead. Supply and demand cannot be viewed as a straightforward equation because they vary a great deal by region and by sector.

The drastic fall in the number of applicants registered with employment agencies and jobcentres is worrying. There are reasons to be concerned that many young people could not be reached due to the restrictions on career orientation and chose other options instead. Further studies are urgently needed.

Despite the shortage of skilled labour, it remains the case that only around two-thirds of young people interested in training are actually placed in standard

vocational training. This shows that there is huge potential to recruit trainees, which is not being fully exploited by companies.

By contrast, the percentage of companies participating in vocational training has once again fallen to a new low. In 2012, 21.2% of companies engaged in vocational training; by 2020, this rate had fallen to 19.4%. This trend of companies withdrawing from providing vocational training has been visible for many years, and it is leading to an ever greater imbalance. A small minority of companies should not be responsible for meeting the costs of securing the supply of skilled labour.

Each year, too many young people are left without a high-quality vocational training place. There is a high risk that they will ultimately be left without a vocational qualification, facing a working life of precarious jobs. The number of young people aged between 20 and 34 without any vocational qualifications has been rising for years, and it has now reached 2.32 million people. This trend can no longer be accepted.

The Federal Government must therefore act rapidly on the commitments it made in its coalition agreement to strengthen vocational education and training. We can no longer afford to lose people on the path to vocational training, and we must ensure everyone has the opportunity to obtain a vocational qualification.

Above all, this includes implementing the vocational training guarantee. A guarantee of this kind would ensure all young people interested in training have the opportunity to receive vocational training and obtain a vocational qualification. Holding patterns on the way to vocational training and the rising proportion of young people with no vocational qualifications must therefore become a thing of the past. This vocational training guarantee must be accompanied by a future fund financed by levied contributions, not only to ensure that all companies contribute to the costs of training skilled workers but also to support those companies which provide training.

Besides the vocational training guarantee, the career orientation provided in schools and by employment agencies must be enhanced and strengthened. A systematic regional approach must be created to manage the school-to-work transition. Youth

employment agencies should be established, in institutional and conceptual terms, in all regions for this purpose. Training mentors from the youth employment agency should have a network that links them with the companies and providers which provide training in the region, and they should be in direct contact with the teachers responsible for career orientation in schools. This will enable them to provide targeted support to young people as they make the transition from school to vocational training.

Efforts to make dual vocational training more attractive must also strengthen vocational schools as the second setting where learning takes place. The Federation and the Länder must therefore urgently launch the Pact for Vocational Schools and invest in vocational training strategies, buildings, equipment, and teaching staff.

4.4 Opinion of the group of Länder representatives

The Länder representatives on the Board of the Federal Institute for Vocational Education (BIBB) would like to thank the government departments involved and the BIBB for producing this comprehensive report.

In the view of the Länder representatives, there should be a particular focus on the group of applicants whose subsequent destination is unknown. As set out in earlier Reports on Vocational Education and Training, this group includes higher proportions of people whose highest school-leaving qualification is a secondary general school certificate and people from a migrant background than the group of people who are known to have started training or another educational pathway. The proportion of previously unsuccessful training applicants is also conspicuously high among people whose post-application destination is unknown, indicating that these young people are evidently repeatedly not managing to successfully transition into training or to complete vocational training.

It is essential to undertake a nuanced analysis of the challenges in matching supply and demand, and these challenges must be addressed at the level of vocational education and training policy by instruments and measures focusing on different aspects. Contact with companies (e.g. as part of introductory training, other internships or a work trial) is decisive in helping young people succeed in transitioning into companybased vocational training. This is especially true of young people from a migrant or forced migration background. The mentoring and support of young people by youth employment agencies also has a positive impact. Alongside the varied measures taken by the individual Länder, attention should also be drawn to the positive effects of the Education Chains initiative, which supports individual career orientation measures with federal funding.

Many of the challenges that the coronavirus pandemic has brought with it remain to be met in 2022. Our combined efforts and solution strategies will be needed to ensure an adequate supply of training places at the national and regional levels and to maintain the attractiveness of dual vocational training. At the same time, in order to recruit sufficient applicants to fill the training places available, we need to motivate young people and persuade them that dual vocational training still has a future and offers them good and attractive employment prospects. In this context, there are significant regional and occupation-specific disparities in terms of the regions with supply problems and those with problems filling training places.

Our shared goal must continue to be to mitigate the impact of the coronavirus crisis on training and to take constructive action in this context. The outstanding commitment of all stakeholders and the flanking support provided by the Federation and the Länder to maintain vocational training remain essential to these efforts. The Länder would like to thank all companies and everyone else involved in providing dual vocational training for their dedicated engagement and shared efforts to sustain vocational training.

LIST OF TABLES 129

List of tables

Table 1:	Applicants registered for dual vocational training	21
Table 2:	Applicants from earlier reporting years	23
Table 3:	Trend in new entrant numbers in the transition sector	25
Table 4:	Registered vocational training places	27
Table 5:	Companies, companies providing training, and percentages of companies providing training	29
Table 6:	Developments in numbers of new entrants in iABE sectors/categories, 2005 to 2021	35
Table 7:	New entrants in iABE sectors/categories by selected characteristics	36
Table 8:	Newly concluded training contracts and supply and demand	38
Table 9:	Newly concluded training contracts in 2021 by Land and training sector	42
Table 10:	Newly concluded training contracts by financing form	44
Table 11:	Newly concluded training contracts by financing form and Land	45
Table 12:	Trend in numbers of company-based training places by training sector	48
Table 13:	First-year trainees in healthcare occupations, excluding training for nursing and	
	care professions regulated by federal law	57
Table 14:	First-year trainees in skilled nursing and care professions	58
Table 15:	First-year trainees in selected social services and education occupations	59
Table 16:	Registered training places and applicants who wanted to start training by the end of 2021	74
Table 17:	Rates at which young German and foreign nationals started training	77
Table 18:	Young adults with no vocational qualifications, 2015 to 2020	83
Table 19:	Advanced vocational exams under the Vocational Training Act/Crafts Code	
	that were sat and passed	86

List of charts

Chart 1:	Developments in numbers of school leavers leaving general schools, 1992 to 2030	20
Chart 2:	Schooling background of new entrants in the transition sector in 2020	26
Chart 3:	Developments in education and training sectors/categories, 2005 to 2021	33
Chart 4:	ANR, expanded ANR, and expanded ANR based on company-based training places	40
Chart 5:	The placement rate of young people interested in training (EQI)	41
Chart 6:	The 25 occupations under the Vocational Training Act and Crafts Code	
	most frequently chosen by young women in 2021	49
Chart 7:	The 25 occupations under the Vocational Training Act and Crafts Code	
	most frequently chosen by young men in 2021	50
Chart 8:	Developments in newly concluded training contracts by gender	51
Chart 9:	Newly concluded training contracts in occupations requiring two years of training	52
Chart 10:	Schooling background of trainees with newly concluded training contracts	55
Chart 11:	Registered unfilled vocational training places	62
Chart 12:	Regional training market disparities	64
Chart 13:	Occupations with a high proportion of unfilled training places relative	
	to all training places offered by companies in 2020 and 2021 (in %)	65
Chart 14:	Occupations with a high proportion of unsuccessful training place	
	applicants in 2020 and 2021 (in %)	66
Chart 15:	Destination of applicants registered with employment agencies or	
	jobcentres on 30 September	69
Chart 16:	Schooling backgrounds of applicants registered with employment agencies	
	and jobcentres in 2021	70
Chart 17:	Opinion of current activity	72

LIST OF ABBREVIATIONS 131

List of abbreviations

AES Adult Education Survey

ANR Angebots-Nachfrage-Relation – supply and demand ratio
BA Bundesagentur für Arbeit – Federal Employment Agency

BIBB Bundesinstitut für Berufsbildung – Federal Institute for Vocational Education and Training

BMBF Bundesministerium für Bildung und Forschung – Federal Ministry of Education

and Research

ESF European Social Fund

EQI Einmündungsquote der ausbildungsinteressierten Jugendlichen – placement rate of

young people interested in training

IAB Institut für Arbeitsmarkt- und Berufsforschung – Institute for Employment Research

iABE integrierte Ausbildungsberichterstattung – Integrated Reporting on Training

KMK Kultusministerkonferenz – Conference of Ministers of Education and Cultural Affairs

NEPS Nationales Bildungspanel – National Educational Panel Study

PROSIMA Econometric prognosis and simulation model

SGB Sozialgesetzbuch – Social Code
SMEs Small and medium-sized enterprises

Imprint

Published by

Bundesministerium für Bildung und Forschung/ Federal Ministry of Education and Research (BMBF) Division General Conditions and Structural Issues of Vocational Training 53170 Bonn

Orders

in writing to
Publikationsversand der Bundesregierung
P.O. Box 48 10 09
18132 Rostock, Germany
E-mail: publikationen@bundesregierung.de
Internet: bmbf.de

or by

Phone: +49 (0)30 18 272 272 1 Fax: +49 (0)30 18 10 272 272 1

June 2022 (English version published in February 2023)

Edited by

BMBF

Layout

BMBF

Printed by

BMBF

Photo credits

Title (from top left to bottom right):
gettyimages/Huntstock;
gettyimages/JackF;
gettyimages/Hinterhaus Productions;
gettyimages/AleksandrarGeorgiev;
AdobeStock/romannoru;
AdobeStock/Robert Kneschke
Foreword: Bundesregierung/Guido Bergmann

This specialised publication of the Federal Ministry of Education and Research is available free of charge. It is not for sale and may not be used by political parties or groups for electoral campaigning.



