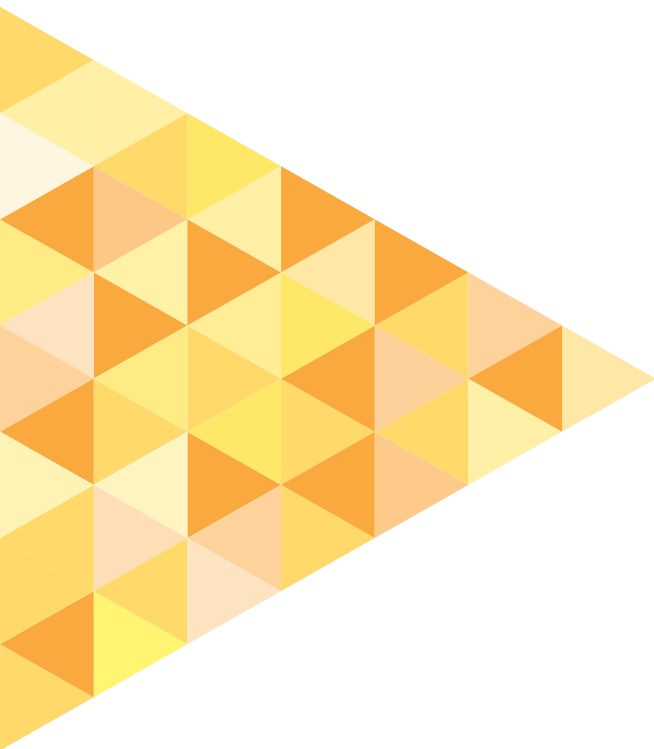


Adrienne Huismann | Ute Hippach-Schneider

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Early leaving from vocational education and training (ELVET) in Germany

Adrienne Huisman | Ute Hippach-Schneider

Abstract:

This article first discusses the concept and understanding of dropping out of vocational education and training in general. It then presents the situation of early leaving from VET in Germany on the basis of the relevant available data on contract dissolution rates. Furthermore, the focus is on the preventive education policy measures that are intended to prevent drop-out as well as factors that can lead to early drop-out. An overview of developments during the COVID 19 pandemic concludes the article.

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Introduction

The phenomenon of drop-out of vocational education and training (VET) is a problem that can be observed in many European countries and is receiving corresponding attention from national VET policies. From an educational economic point of view, with regard to the labour market's need for skilled workers as well as with regard to individual educational opportunities, the aim is to achieve a low drop-out rate. A variety of programmes and measures are being developed to reduce dropout rates.

At European level, the relevance is reflected by the commonly agreed benchmark. The target is that by 2030 the proportion of 18-24-year olds who do not have a secondary qualification and are not in an education programme should be below 9 per cent on average in the EU. In 2021, an average of 9.7 per cent of young people aged 18-24 in the EU were early leavers from education and training.

This article first discusses the concept of dropping out of training and then presents the situation in Germany. The focus is on the preventive education policy measures that are intended to prevent drop-out as well as factors that can lead to early drop-out. An overview of developments during the COVID 19 pandemic concludes the article.

Parts of this paper were developed in the context of the ReferNet network¹ activity in 2022.

¹ www.refernet.de

1. Definition of Early leaving from VET (ELVET)

To measure the European benchmark on *Early leavers from education and training (ELET)*, Eurostat uses data from 18 to 24 year olds who have completed at most a lower secondary education and were not in education or training during the four weeks preceding the labour force survey (LFS). However, this indicator does not allow to identify the share of early leavers who drop out of initial vocational education and training compared to general education.

Besides the fact that there are no European data available on dropouts of VET, there is currently no agreed definition of what is early leaving from VET (ELVET). For the ReferNet activity in 2022, Cedefop developed a definition that should ensure that all partners from the network member countries have a common understanding of ELVET in their reporting. This should ensure the basis for comparability of reports and information.

Cedefop suggested to consider the following criteria for a working definition of ELVET:

- (a) age group 18 to 24;
- (b) highest level of education or training completed: ISCED 2011 level 0, 1 or 2;
- (c) have started vocational training at ISCED level 3 or 4 but did not receive an upper secondary VET qualification;
- (d) have not received any education or training (i.e. neither formal nor non-formal) in the 4 weeks preceding the survey (not currently engaged in education and training).

For Germany these criteria could not be followed entirely due to a lack of corresponding data. Instead this report is based on two indicators monitored in Germany, which partly fulfil the criteria mentioned above:

- (A) The **contract dissolution rate** (*Vertragsauflösungsquote LQ*) refers to learners in the dual apprenticeship system (which covers approx. two thirds of IVET learners).
- (B) The **rate of unskilled young people**, i.e. with no formal VET qualification (*Ungelernte / nfQ: nicht formal Qualifizierte*).

1.1 Contract dissolution rate

A widely applied national ELVET indicator is about the dual system in VET: the **contract dissolution rate** is defined as an approximative value for the proportion of premature contract terminations compared to training contracts started (*Vertragsauflösungsquote LQ_{neu}*), which was 25.1 per cent in 2020 (amounts to 137,884 dissolved contracts). The rate based on the BIBB "stratification model" (quota sum method) is calculated according to the formula in BIBB Datenreport 2022, p141 (UHLY 2022b). **This is not a dropout definition** since it includes apprentices who continued training but with another employer, changed their training occupation, or changed to another type of vocational or to a general education programme. It is not possible to trace the destination of apprentices whose contract was terminated early, but numerous studies show that in about half of the contract dissolutions, learners continue their (vocational) education and training in another company/school or occupation - and are *not* leaving VET early (e.g. analysis of the 2011 BIBB transition study: BEICHT/WALDEN 2013).

Statistical data are collected within the VET statistics (*Berufsbildungsstatistik*) of the Federal State and the Laender. The features available in the training contract data ("apprentice data") of the vocational training statistics, as of reporting year 2020, are listed in UHLY 2021, p12. Further, the NEPS (national education panel study) provides a rich dataset on education from early childhood to adult learning based on a longitudinal study. The contract dissolution rate is differentiated according to occupational sector, occupations, region, gender, citizenship and type of school leaving certificate.

The contract dissolution rate partly fulfils the criteria given in the Cedefop working definition:

- (a) no differentiation by age group, but applies to IVET dual apprentices, whose average age when concluding an apprenticeship contract is 19,9 years in 2020 (BIBB Datenreport 2022, p157 - BUNDESINSTITUT FÜR BERUFSBILDUNG 2022)
- (b) the highest level of education they have completed is ISCED 2011 level 2, except for the growing share of apprentices with a higher education entrance qualification – so ISCED 2011 level 3 (29.2% of apprentices in 2020 in BIBB Datenreport 2022, p119)
- (c) they have started IVET at level 3, since they have concluded a training contract - but even if their contract was terminated prematurely, it doesn't mean that they haven't concluded a new contract or continued education and graduated from upper secondary education
- (d) does not apply

Another closely monitored indicator in the dual system is the success rate of final examinations (BIBB Datenreport 2022, A5.7, p148-157: UHLY 2022a). However, this indicator refers only to apprentices who have registered and participated in the final examinations. The percentage of those who have failed after 3 attempts is very low (0.5% in 2020) and does not say much about those who have left VET earlier.

Until 2022, early leaving from *school-based* VET was not monitored explicitly. On the basis of the ninth-grade sample (cohort 4, wave 1 to 11) of the National Educational Panel (NEPS), it is possible for the first time to examine educational pathways in the dual system *and* in the **school-based vocational system** together and to conduct more in-depth analyses of educational pathways (e.g. the further **pathways after the dissolution of the first training** relationship are examined). The survey shows that the share of premature VET drop outs is higher in school-based VET (38%) than in the dual VET system (24%). Analyses are available according to type of school leaving certificate, gender, migration background and realisation of preferred training (AUTOR:INNENGRUPPE BILDUNGSBERICHTERSTATTUNG 2022, Chapter E, p180-185).

1.2 Young people with no formal VET qualification

Another indicator has been closely monitored since the nineties by BIBB (Datenreport 2022, Chapter A11, p 285-293 - KALINOWSKI 2022): The proportion of **unskilled young people**, i.e. **with no formal VET qualification** (*Ungelernte / nfQ: nicht formal Qualifizierte*). Evaluations conducted by BIBB based on the Microcensus data (Mikrozensus MZ, Federal Statistical Office) show that in 2020, 15.5 per cent (or 2.33 million) of young people aged 20 to 34 in Germany had no formal VET qualifications and so lacked the prerequisites for qualified participation in working life (for the age group 20-24, the nfQ quote was somewhat lower: 13.9%). This not formally skilled group is very heterogeneous. The main part are low-qualified

people who tend to have problems on the labour market - but there are also some people who have started but not completed training or a course of studies. The latter are formally regarded as having low qualifications or as unqualified but have fewer problems integrating into the labour market because they have already acquired competences and often only break off training when they have found prospective employment. People who have not yet completed vocational training or higher education (e.g. pupils, apprentices and students) and those doing voluntary service are not counted as people with no formal qualifications.

The data are differentiated according to age cohorts (20-24; 20-29; 25-34 and 20-34), in time (yearly since 1996 – but data for 2020 is based on a modified survey methodology so with limited comparability to 2019 and earlier), according to gender, type of school leaving certificate, region, citizenship (German/non-German) and migration background.

The rate of young people without formal VET qualification (nfQ) also partly fulfils the criteria given in the Cedefop working definition, but other aspects than the contract dissolution rate:

- a) Differentiation according to age cohorts, with most indicators available for the age group 20-34 (BIBB Datenreport 2022, p 287-289)
- b) the highest level of education they have completed is ISCED 2011 level 2, except for the share of young people without a formal vocational qualification but with a higher education entrance qualification – so ISCED 2011 level 3 (26.4% of nfQ in 2020 – see BIBB Datenreport 2022, p 288). However, the share of non-formally qualified among young people with a higher education entrance qualification is much lower (7.4% in 2020) compared to other types of school leaving certificates or none at all.
- c) In this case, there is no information on the start of vocational training at ISCED level 3 or 4, neither on the completion of an upper secondary VET qualification.
- d) nfQ young people are not currently engaged in education and training, but working in low qualified jobs or unemployed (20.9% of them are unemployed, according to Federal Employment Office 2022). People who have not yet completed vocational training or higher education (e.g. pupils, apprentices and students) and those doing voluntary service are not counted as people with no formal qualifications.

2. Prevention and identification of learners at risk

Beside the centralised (but non-nominal) monitoring of indicators mentioned above, there are comprehensive preventive programmes in Germany for supporting learners at risk of dropping out of VET. Further, in-company trainers and VET school teachers have access to professional development to help them identify distress signals from VET learners.

2.1 Prevention programmes

There are programmes and support measures throughout the country for identifying and supporting (potential) early leavers from VET, in particular: The Educational Chains initiative under the motto “No school leaving without subsequent formal qualifying pathway” (e.g. career orientation programmes BOP and BOF, career start coaching BerEB, VerA mentoring), the Assisted training programme (AsA), the regional programme Qualified Training Assistance (QuABB), the youth employment agencies (JBA).

All through the **Educational Chains standard support programmes**² (from Grade 8 until the obtaining of formal vocational qualification), in addition to the career orientation programmes BOP and BOF, the personal coaching approach is ensured by several programmes:

- **career start mentoring** (*Berufseinstiegsbegleitung BerEB*)

Salaried “career start mentors” (transition coaches) accompany disadvantaged young people until they obtain a general school leaving certificate and as they make the transition from school to training. Contacting is based on the analysis of potentials in Grade 7 or 8 (assessment and profiling of skills, attitudes and preferences): young people identified being at risk of leaving school without certificate are nominated by the teacher and career counsellor for additional assistance in the form of an individual career start coaching.

- the **VerA initiative** (*Verhinderung von Ausbildungsabbrüchen*)

Young people facing problems during vocational training (e.g. at the vocational school, in the company or in their private environment) and being at risk of dropping out of VET can receive one-to-one/personalised support from volunteer coaches: the “senior experts” working for the “prevention of training dropouts” initiative called VerA. Senior experts are retired professionals with broad experience in their respective field of work. Apprentices, parents, companies, vocational schools, training guidance of the chambers or employment agency can contact the VerA team. If needed, the VerA mentors can take over the accompaniment started at secondary school by a career start mentor and continue the individual coaching until completion of VET.

Besides the Educational chains, there are already established structures (e.g. in German Social Code SGB) supporting (potential) early leavers:

- **Assisted training programme** (AsA)

The aim of the programme is to provide continuous support and socio-educational guidance before and during in-company vocational training that is individually tailored to the needs of the young person and also takes effect on the company side. Since 2020, legally anchored as a further developed, permanent support instrument, which also includes the former measure “support during vocational training”.

- **Regional programme Qualified Training Assistance**³ (*Qualifizierte Ausbildungsbegleitung in Betrieb und Berufsschule QuABB*)

Qualified training assistance provided within the framework of the QuABB programme aims at preventing learners from dropping out of the dual training system. The guidance services also address companies, teachers and parents. QuABB is a German abbreviation that stands for professional coaching during the vocational training in companies and at vocational schools. The programme is a Hesse-wide system of support for vocational training courses which acts both acutely and preventively. Training assistance provided at the respective QuABB locations is offered by local agencies. It is administered and controlled by the Hesse-wide Coordination Office at the Institute for Vocational Training, Social and Labour Market Policies INBAS GmbH. QuABB is sponsored financially by the State of Hesse and the European Union through the European Social Fund.

- **VET transition system**

² https://www.bildungsketten.de/bildungsketten/de/uebergang/individuelle-begleitung/individuelle-begleitung_node.html

³ <https://www.quabb-hessen.de/ausbildungsabbrueche-vermeiden.html>

In the VET transition system including preparatory VET and second chance VET programmes (*Berufsvorbereitungsjahr BVJ, berufsvorbereitende Bildungsmaßnahmen BvB, Einstiegsqualifizierung EQ, Zukunftsstarter*), school leavers with difficulties and unskilled young people are given special support to be able to (re)integrate a formal qualification.

- **Youth employment agencies⁴** (*Jugendberufsagentur JBA*)

From the young people's perspective, the youth employment agency is a central point of contact for different issues in the transition from school to work, which provides them with individual and bundled support, also during training. Although the legal responsibilities remain with the individual legal entities (employment agency, job centre and youth welfare office), they can coordinate with each other more easily and jointly find the best support options for the young people. The question of responsibility no longer has to be clarified by the young people themselves.

2.2 Identification of learners at risk

All programmes and support measures mentioned above also detect early signs of learners at risk of dropping out of VET: e.g. the QuABB team has discussed the topics of "early detection" and "weak signals" with their cooperation partners in the chambers of skilled crafts, the chambers of industry and commerce and the vocational schools as well as in many companies and published a compilation of working aids in the "Early Warning System Toolbox" with three target groups: apprentices, VET teachers and trainers. In many support measures, a multidisciplinary support team is available for VET learners at risk or bring different actors to cooperate. This can include VET school staff and in-company trainers through cooperation with relevant external services, e.g. social workers or youth workers.

In-company trainers have access to professional development to help them identify distress signals from VET learners in work-based learning. According to the Vocational Training Act (BBiG), any company carrying out apprenticeship has at least one employee who is the designated responsible trainer and has proven his aptitude to take over this task by successfully passing the examination according to the Ordinance on Trainer Aptitude (AEVO, which is also part of the Meister exam). For example, one skill to be acquired is the **ability to identify learning difficulties of apprentices**, and to give individual learning support and guidance.

The knowledge relevant to the examination is imparted in so-called "training of trainers" courses (AdA courses). In 2009, the Board of the BIBB has published a framework plan with details of the knowledge to be imparted in the preparatory courses. The BIBB recommends taking a 115-hour course to prepare the AEVO examination. The relevant bodies (mostly the chambers) organise such courses, offered in different formats (attendance, distance learning or blended formats). Based on the results of a survey in 2020/21 on the need to modernise the AEVO and the corresponding framework, BIBB recommends to keep the AEVO in its current version due to the open wording but to update the contents of the corresponding BIBB framework plan until mid-2023. Additional modular CPD and refresher courses for trainers should supplement the formal offer.

Indeed, there is a variety of opportunities for punctual CPD provided by the employer, the chambers (e.g. www.stark-fuer-ausbildung.de or podcast "Be a Mentor") and other educational institutions. The portal www.foraus.de is a trainer information and exchange forum. It also provides the possibility for trainers to further qualify themselves through online learning

⁴ <https://www.servicestelle-jba.de/>

modules. This flexible and low-threshold offer is important to address specific competences of trainers, for example the ability to identify learning difficulties of apprentices (HUISMANN/HIPPACH-SCHNEIDER 2022).

Professional development for identifying distress signals from VET learners is also available for **VET school teachers**. In the field of initial education and training as well as continuous professional development of teachers, the federal system confers cultural sovereignty on the federal states (Länder) and accords them the right to pass legislation in school-related matters. Vocational school teachers are thus trained under the jurisdiction of the Länder. The Standing Conference of the Ministers of Education and Cultural Affairs (*Kultusministerkonferenz, KMK*) is a national coordinating platform ensuring common standards and mutual recognition, e.g. through framework agreements, information and monitoring of the 16 Länder systems (HUISMANN/HIPPACH-SCHNEIDER 2022, p15-17).

3. Factors leading to early leaving from VET

The factors influencing early leaving from VET have been surveyed and analysed during the last decades using several sources of data. The factors can be grouped in three categories: systemic or structural factors, factors linked to the training conditions and personal factors.

3.1 Data sources

There are several sources of data in Germany used to analyse the possible risk factors leading to early contract termination in apprenticeships or risk of ending dual training without achieving a qualification:

- The **yearly German census on VET** (*Berufsbildungsstatistik*) by the Federal Statistical Office and the statistical offices of the federal states - with more determinants since 2009: refer to BIBB Datenreport 2022, A 5.1, p87-89 and BIBB data system on apprentices DAZUBI⁵ as well as numerous analyses e.g. from Uhly in BIBB Datenreport 2022, A 5.6, p138-147 (UHLY 2022b); Rohrbach-Schmidt and Uhly (ROHRBACH-SCHMIDT/UHLY 2015) and Uhly in BIBB-WDP 157 (UHLY 2015);
- The **yearly national education panel study NEPS** (e.g. in BIBB Datenreport 2020, A8.3, p 211 - SCHNITZLER 2020);
- The **Microcensus MZ** (e.g. in BIBB Datenreport 2022, A 11, p285 - KALINOWSKI 2022)
- Several **company panels**: BIBB company panel on qualification and competence development, so-called Training Panel (e.g. ROHRBACH-SCHMIDT/UHLY 2016), BIBB reference company panel RBS⁶ (surveys among 1300 companies once or twice a year since 1995), IAB company panel (LEBER/SCHWENGLER 2021)
- Several **surveys among VET learners/applicants** and on educational biographies (BIBB, BA)
 - BIBB transition study (2011)
By way of contrast to the contract dissolution rate, the BIBB Transition Study considers young people who started an apprenticeship for the first time but did not

⁵ <https://www.bibb.de/de/1864.php>

⁶ <https://www.bibb.de/de/1376.php>

successfully complete this training *in the occupation originally selected* (BEICHT/WALDEN 2013) - so only genuine occupational dropouts are considered.

- Yearly BA/BIBB survey among IVET applicants registered at the Federal Employment Office⁷
- Sample of Integrated Employment Biographies SIAB (NEUBER-POHL 2021, p9)

3.2 Factors influencing ELVET

The following analyses mostly refer to early contract dissolutions in the dual training system, which is not equivalent to dropping out of VET (refer to definitions in Chapter 1). Further, against the background of the data situation and the heterogeneity of the phenomena behind premature contract terminations in dual vocational training, the question of causes is not easy to answer. The causes of early contract dissolutions are diverse and complex – and they influence each other. It is easier to determine and describe in which areas there are particularly high or low contract dissolution rates and what causes apprentices and companies cite; however, both analyses are not yet causal analyses (UHLY 2015, p 72). It is more about describing factors influencing premature contract termination. Sometimes, risk factors of young people for being without a formal VET qualification (nfQ) are described as well. In most cases, the risk factors are similar and to the same extent for both indicators (LQ) and (nfQ).

3.2.1 Systemic/structural factors

There is a close correlation between probability of premature contract dissolution and the **type of general school leaving certificate** achieved by the apprentices before starting training (early differentiation and track selection). The proportion of contract terminations rises in line with lower general school leaving qualifications on the part of the apprentices. In 2020, young people with the lower secondary school leaving certificate - or who have failed to achieve it - are more than twice likely to have a contract dissolution (LQ: 35.7% respectively 35.3%) than young people who are in possession of a higher education entrance qualification (15.6%) (UHLY 2022b, p143). Further, according to BEICHT/WALDEN (2013, p7), the risk of terminating training without achieving a qualification is at its highest for apprentices with poor grades during their period of general schooling. The type of general school leaving certificate achieved is similarly influencing drop out of school-based VET (AUTOR:INNENGRUPPE BILDUNGSBERICHTERSTATTUNG 2022, Chapter E, p180-185) and the risk for young people to be without a formal VET qualification – nfQ indicator (KALINOWSKI 2022).

There is also a close correlation between probability of premature contract dissolution and the **participation in VET transition programmes** by the apprentices before starting training (BEICHT/WALDEN 2013). But this is of course linked to the achieved school leaving certificate, since the chance of participating in a VET transition measure is much higher for young people without a school leaving certificate or a lower school leaving certificate.

But this fact is not automatically a causality or should at least be seen in a broader context with **multiple factors influencing each other**. Indeed, why does a learner fail to achieve the lower school leaving certificate or not more than the lower school leaving certificate (e.g. social background)? And in what type of training occupation with what kind of training conditions do most learners without or with the lower school leaving certificate end up in? This is all linked together. As UHLY (2015) notes, young people with a lower secondary school leaving certificate

⁷ <https://www.bibb.de/de/138855.php>

also have a higher risk of contract termination because access to the desired occupation as well as access to more stable training segments is less likely for them than for young people with higher school leaving certificates.

In structural terms, the risk of early contract termination is also influenced by the **type of training**, i.e. whether such training is company-based or organised along extra-company lines. According to BEICHT/WALDEN (2013), the 2011 BIBB Transitional Study shows that IVET learners who undergo **extra-company training** (not in a company) are at greater risk. Results from multivariate analyses of the BIBB Training (company) Panel by ROHRBACH-SCHMIDT/UHLY (2016) suggest that the stability of apprenticeships in companies are positively linked to an **investment-oriented training model** (versus a production-oriented one), a direct recruitment strategy (e.g. with internship – allowing a better matching), a collective representation of interests in form of staff councils, and an employment structure that is characterised by highly qualified tasks.

Both the companies as well as the apprentices, when asked about reasons explaining premature training dropout, mention **misconceptions about the occupation and wrong career choice / the occupation is not the preferred one** (apprentices' view: e.g. SCHNITZLER 2020 p211-214; companies' view: e.g. BIBB and IAB company panels). Sometimes, it is not a lack of guidance but a lack of choice and the necessity to make compromises for the apprentices (AHRENS et al. 2021). The fact whether the occupation in which the training takes place corresponds to the desired occupation has an important effect on premature ending of training in the dual VET system and in the school-based VET system (AUTOR:INNENGRUPPE BILDUNGSBERICHTERSTATTUNG 2022, p182-183). According to analyses of the national education panel study (NEPS), it is the first ground given by apprentices for an early contract dissolution (SCHNITZLER 2020, p213). For two-fifths of the young people who end their training without a qualification, this is not their desired occupation - in other words more than twice as often as for those who successfully complete their training. Women are more strongly affected in this regard (BEICHT/WALDEN 2013). Guidance can be much more successful if it has a practical part, like an **internship** in several occupations or **direct contact** with the future training company (ROHRBACH-SCHMIDT/UHLY 2016).

Over time, the contract dissolution rate has fluctuated since the 1990s in connection with the **situation on the training market**. The more favourable the supply-demand relationship was from the perspective of those seeking training places, the higher the dissolution rate was (cf. UHLY 2015, p39 and BIBB Data Report 2013, Chapter A4.7 - BUNDESINSTITUT FÜR BERUFSBILDUNG 2013). This may be due to the fact that, if the situation on the training market is favourable from the apprentice's point of view and the apprentice is dissatisfied with the training place he or she has taken up, the apprentice is more likely to switch to a preferred training relationship.

VET graduates in Germany have a high probability to find an employment rapidly. But in some occupational sectors, the income and career chances are less attractive. NEUBER-POHL (2021) investigated the role of apprenticeship wages and **income prospects after completion** for apprenticeship non-completion in Germany. The findings highlight the importance of income prospects for apprenticeship non-completion. According to an analysis of the BIBB training panel by ROHRBACH-SCHMIDT/UHLY (2016), **good prospects of being taken on after training and higher average gross wages** of full-time employees with qualified jobs in the company should increase the interest of apprentices in obtaining a qualification and remaining in the training company - and reduce the risk of contract dissolution. The fact that the pay of qualified skilled workers is higher than that of unqualified workers may be viewed as a significant incentive for completing training.

Other structural factors influencing the contract dissolution rate in Germany are (UHLY 2022b):

- The **timing**: Two thirds of contract terminations occur in the first year of training
- The **region**: The East of Germany is more affected
- The **size of the company**: Small company are more affected
- The **branch**: The skilled crafts and the liberal professions are more affected
- The **occupation**: The service sector, in particular occupations in the hotel and restaurant trade, occupations in the transport sector, the body care sector (e.g. hairdresser), or cleaning sector are more affected. Construction trades and food trades (e.g. butcher) are also more affected.
- The **occupational segment and training model**: the segments where the production-oriented training model prevails are more affected (ROHRBACH-SCHMIDT/UHLY 2016).

3.2.2 Training conditions

SCHNITZLER (2020, p 213) analysed the NEPS data to explain early contract terminations. In consensus with the existing literature, apprentices named as third most frequent reason (39%) that they were not taught enough of the **training content** during the apprenticeship – in other words, a perceived poor quality of training following the motto “work instead of training”. The results of the multivariate analyses of the BIBB training panel by ROHRBACH-SCHMIDT/UHLY (2016, p374) are also interesting in this context. They suggest that the stability of apprenticeships in companies are positively linked to an investment-oriented rather than a production-oriented training model, for which the immediate interests of the company take precedence over the quality of the training. Small companies with less human resources tend to use more the production-oriented training model, sometimes called “en-passant” training, where the handling of conflicts is supposedly more difficult (cf. ROHRBACH-SCHMIDT/UHLY 2015, p110; UHLY 2015, p73).

Indeed, conflicts during the apprenticeship arise more easily and are more difficult to solve if the **teaching and communication methods** in the training company or at the VET school are unattractive or inappropriate. SCHNITZLER (2020, p 213) analysed the NEPS data to explain early contract terminations. In consensus with the existing literature (see also BEICHT/WALDEN 2013, p8), apprentices named as second most frequent reason (52%) for terminating their training contract **conflicts** in the training company (with trainers, supervisors, colleagues, apprentices) or in the VET school (with teachers, fellow apprentices) and how there were dealt with.

There is a strong consensus in the literature that **unsatisfactory working conditions** in the training company have an important impact on ending an apprenticeship prematurely (e.g. UHLY 2015, BEICHT/WALDEN 2013, ROHRBACH-SCHMIDT/UHLY 2016). When asked about reasons to quit training prematurely, many apprentices cite unattractive working conditions such as high workload, unpaid overtime, inconvenient working hours and holiday arrangements. Small companies and some branches (e.g. service sector, in particular the hotel and restaurant trade) are more affected.

However, **depending on whether (former) apprentices or training companies are asked**, the reasons given for terminating or considering terminating the contract tend to be the in-company training conditions or the young people's training performance. As UHLY notes in BIBB Data Report 2022 (p146): If apprentices or training companies are asked directly about the reasons for early contract terminations, the various studies come to largely consistent findings. When young people or (former) apprentices are interviewed, they predominantly

mention company-related reasons, such as communication problems or conflicts with trainers and supervisors, inadequate training quality (work instead of training, inadequate teaching of training content). They also cite working conditions such as unpaid overtime, unfavourable working hours and holiday arrangements. Occupation-related reasons are mainly mentioned by those who stated that they could not realise their dream job or had other ideas about the profession (cf. UHLY 2015).

If companies or trainers are asked (e.g. BIBB training panel or IAB company panel), the reasons given are mainly that are the responsibility of the young people, such as inadequate vocational orientation or choice of occupation, a lack of motivation and willingness to perform (absenteeism, insufficient identification with the company, lack of perseverance), and performance (insufficient performance in the company, overstraining) of the apprentice. It should be noted here, however, that the question about reasons does not constitute a causal analysis and - as the findings show - there is a risk of subsequent justifications and mutual attribution of blame (cf. UHLY 2015). LEBER/SCHWENGLER (2021) analysed the IAB company panel on the subject of training contracts prematurely terminated. Companies that terminated training contracts prematurely at their own initiative were asked about the reasons for this. The results show that in most cases (39%) the **lack of commitment** on the part of the apprentice was the decisive factor for the termination of the contract. Just under a quarter of the companies cited poor social behaviour on the part of their apprentices as the most important reason for termination, and in the opinion of about one in five companies, the apprentices were overtaxed or not suited to the occupation.

3.2.3 Personal factors

BEICHT/WALDEN (2013) analysed the influence of **social background** characteristics (e.g. education level of parents, professional status of the father) on the risk of ending an apprenticeship before having completed the qualification. It can be seen that young people who quit their training without a qualification, more often have parents who do not have a (vocational) qualification and the father is more likely to have a low-skilled job. Compared to them, young people whose parents have completed vocational training or who have a higher school education or a university degree are far less at risk. Both analyses of the 2011 BIBB transition study by BEICHT/WALDEN (2013) and of the NEPS (start cohort 4) by SCHNITZLER (in BIBB Data Report 2020, p211-214) show that young people mention **health problems** as reason for quitting training prematurely.

Most reasons given by apprentices for quitting dual training prematurely affect women to a greater extent than men according to BEICHT/WALDEN (2013). And in some situations, there are **gender specific reasons** like pregnancy and childcare for women and men tend to drop out more often to seek employment. BEICHT/WALDEN found out, that even when all other factors are considered, young women have a significantly higher risk of dropping out of an apprenticeship without a qualification than young men (15% versus 10%). This could be related to the fact that women are much less likely than men to be trained in their desired occupation – partly because it is often more difficult for young women to find an in-company apprenticeship placement and they have to make compromises (AHRENS et al. 2021, p7).

UHLY (2022b) also demonstrates a slightly higher average contract dissolution rate for women (25.4%) than for men (24.8%) in 2020. Women have a higher contract dissolution rate in the craft trades, agriculture and housekeeping sectors in particular. Except for housekeeping, the dissolution rate for women is particularly high in branches in which they are underrepresented. The same applies to men. There may once again be a correlation here with the fact that the training occupation does not represent the respective desired occupation. The supposition

would be that women still prefer to work in typically female occupational fields, something which also seem to apply to their male colleagues (HENSEN 2014). By contrast, young women are *less* affected than young men by premature termination of school-based VET (AUTOR:INNENGRUPPE BILDUNGSBERICHTERSTATTUNG 2022, Chapter E, p180-185) and the risk for young women to be without a formal VET qualification is lower as well (KALINOWSKI 2022).

According to UHLY (2022b, p142-143) and BEICHT/WALDEN (2013), apprentices with a foreign citizenship are more likely to quit an apprenticeship placement prematurely than their German counterparts (in 2020, contract dissolution rate of 33.2% versus 24.0%). This is the case in all sectors, but especially in the agriculture. In part, the differences in dissolution rates between German and foreign apprentices can also be attributed to differences in the highest general school leaving certificate. **Foreign citizenship or background** is similarly influencing drop out of school-based VET (AUTOR:INNENGRUPPE BILDUNGSBERICHTERSTATTUNG 2022, Chapter E, p180-185) and the risk for young people to be without a formal VET qualification – nfQ indicator (KALINOWSKI 2022).

4. COVID-19 and its impacts

4.1 Effects of COVID-19 on the learning process

In Germany all schools had to close from 22 March to 4 May 2020, so during 6 weeks (minus the two-week Easter school break). Then, until the 6-week summer break 2020 (depending on the federal state, starting approx. between end of June and end of July), two third of schools remained closed until school start in August/September 2020 (BIEBELER/SCHREIBER 2020). However, the schools which opened again only offered partially classes in the school with most classes being online – so-called home schooling. Due to high incidences, some schools had to close again in November and December 2020, on and off, until February 2021.

Various surveys show that students in Germany spent much less time on school activities during the first lockdown than when school was in session (ANGER/PLÜNNECKE 2020; WÖBMANN et al. 2020). Based on a survey of parents in February and March 2021, WÖBMANN et al. (2021) conclude that the situation is somewhat better during the second phase of extensive school closures. Thus, at the beginning of 2021, students spent around 4.3 hours a day studying for school compared to 3.6 hours during the first lockdown. This is likely to be due in significant part to progress in the design and implementation of home schooling.

Apprentices worked partly remotely (so-called “homeoffice” in Germany) during the company-part of the training (but less than in home schooling for the school-part of the training), which is like teleworking with time recording.

Regarding apprentices BIEBELER/SCHREIBER (2020, pp. 20f.) show that only 36 per cent of apprentices across all branches were able to attend classes in **VET schools** after the first Corona lock down phase – until approx. August 2020. Other 53 per cent received learning materials and homework from their VET school during this period whereas 11 per cent said, they did not. However, the VET schools were differently affected depending on the occupational sector (and the federal state). Half of the surveyed **companies** had to close due to contact restrictions during the first Corona lockdowns (ibid. p 5-6, p16-28). The companies in the hotel and restaurant sector were the most affected. Short-time work and teleworking were used by many companies in the following months. However, only 20 per cent of companies that provide training sent their apprentices in remote working. Some 80 per cent of the respondents said they could continue their training in situ, especially in the skilled craft

sector and in small companies. In such occupations, most training activities cannot be carried out at home, except for theoretical knowledge. Apprentices were placed in short-time work only as a last resort by 12 per cent of the responding companies – again mostly in the hospitality sector (35%).

However, this survey took place at an early stage of the pandemic (Spring/Summer 2020) and it seems that the use of remote work increased among apprentices later on: according to the DGB-Youth survey which took place in February 2021, almost 60 per cent of the apprentices interviewed completed at least parts of their company training from home (DGB-JUGEND, pp. 22f.). This is confirmed by a BIBB company survey (RBS) carried out in September/October 2020 (EBBINGHAUS 2021, pp. 12f.).

In addition to the school closures, which of course also affected the vocational schools, the companies also had to create and apply hygiene concepts. In case it was not possible to do one's work from at the company the question arose as to how an apprenticeship at a distance could lead to the desired learning successes. Digital learning opportunities had to be put into use quickly.

- About one third of the training companies used or planned to use mobile devices or telephone and video conferencing systems to enable apprentices to learn at a distance.
- Digital media (for example apps and learning programmes or research on the internet) were used by slightly more than half of the companies.
- In industry and commerce as well as in the public sector, digital end devices and media were used comparatively frequently (BIEBELER/SCHREIBER 2020, p. 25ff).

In order to support their apprentices in the best possible way, additional assistance that would not have existed without the Covid-19 crisis was offered in just under half of the companies. Due to remote work and home schooling, the companies primarily upgraded the technical equipment for their apprentices (57%) (IFO INSTITUT/RANDSTAD 2021).

4.2 Experiences and views of the apprentices

According to the DGB survey 2021 among 1,000 apprentices in February 2021 (p16), almost all respondents were affected by home schooling or distance learning (94.9%). Almost one third of the respondents (30.1%) were of the opinion that the subject-specific quality of vocational school teaching had deteriorated since the beginning of the Corona pandemic. More than half (52.7%) of the respondents complain about the digital equipment of vocational schools. One-third (34.5%) felt that the necessary curriculum was rather not imparted during the home-schooling phases and another 8.5 per cent said that the curriculum was not imparted at all. Overall, more than half (52.9%) of the respondents are not satisfied with the quality of home schooling and distance learning. However, for almost 70 per cent of the apprentices, the vocational school teachers were always or often available as contact persons. Only 6.6 per cent of the respondents stated that the teachers were rarely (5.7%) or never (0.9%) available.

The Covid-19 pandemic placed a considerable burden on apprentices. 72 per cent of them felt (very) strongly burdened by the pandemic in their lives. Women were more affected by this stressful situation than men. More than one-third (34.6%) of respondents were very worried about not being able to successfully complete their training due to the impact of the Corona pandemic. Fear of failure was highest in small and micro enterprises. Not even half of the apprentices (42%) said they had received help with problems and uncertainties. Only one third of the respondents (33.1%) had their company trainers always available during the teleworking phases.

4.3 Helpful features and supportive measures

With the federal programme *Securing Apprenticeship Placements* (SAP, from August 2020), the Federal Government aimed to support training companies in all sectors of the economy during the difficult economic situation due to the Covid-19 pandemic. It aimed to motivate them to maintain their apprenticeship placements and enable young people to continue and successfully complete their training.

Specifically, training capacities were to be maintained and expanded, short-time work for apprentices was to be avoided, contractual and joint training was to be promoted, and incentives for taking over apprentices in the event of insolvency were to be created. In particular small and medium-sized training companies that continued to provide training despite considerable economic difficulties as a result of the COVID 19 crisis received funding through the federal SAP-programme.

Only when all options had been exhausted could short-time work also be considered for apprentices. In this case, apprentices were initially entitled to payment of their full training allowance for at least six weeks (section 19 (1) no. 2 BBiG). After that, in the view of the DGB youth, short-time allowance should apply.

According to DGB Youth survey (2021, p28-29), one in eight apprentices (12.2%) had their own experience of short-time work. Just under a third of those affected have spent up to 10 days in short-time work since the start of the Corona pandemic, a further 21.4 per cent up to 30 days, 24.5 per cent between 31 and 60 days and 22.2 per cent more than 60 days. The proportion of apprentices sent to short-time work is particularly high in micro-enterprises with up to 4 employees (63.6%), while in large enterprises with more than 500 employees only 17.1 per cent were affected.

There were also federal support programmes to implement the use of digital media also necessary for distance learning and to train the trainers on digital skills and tools (see www.qualifizierungdigital.de and www.foraus.de; or the chambers' trainers' portal <https://www.stark-fuer-ausbildung.de/> with support material and Train-the-trainer workshops).

All the results of the non-representative survey of VET staff reflect the fact that a large majority of those surveyed have devoted themselves to this task in depth (RISIUS 2021). 63.6 per cent of the trainers and 79.6 per cent of the teachers at vocational schools have already dealt intensively with the digitalisation of training. More than half of the respondents attach great importance to the digitalisation of vocational training. They experience a great deal of support from the companies or schools where they work and report that the technical equipment is satisfactory. From the respondents' point of view, the support from the management level at the vocational schools is higher, while the technical equipment in the companies is better. However, 26.1 per cent of the teachers at vocational schools and 15.8 per cent of the trainers describe the technical equipment as poor or very poor (ibid. p19).

With regard to the digital competences imparted, it was shown that the trainers in the companies surveyed stated on average more frequently than vocational school teachers that they impart digital competences intensively. Nevertheless, both learning venues contribute to the acquisition of digital competences: 88.5 per cent of the teachers and 96.5 per cent of the trainers stated that they impart at least one digital competence (ibid. p11). The focus of vocational schools is on methodological skills, while practical skills are in the foreground in companies. The use of digital learning media also showed some differences, but also similarities between the learning venues. Particularly striking was the different use of the digital report portfolio. Unlike the companies, the vocational schools are not obliged to maintain or check the report portfolio, which explains the large difference in the intensity of use (ibid. p19).

All the federal states responsible for vocational schools have also provided guidelines on distance learning, e.g. in Lower Saxony (NIEDERSÄCHSISCHES KULTUSMINISTERIUM 2020).

4.4 ELVET in the context of COVID-19 pandemic

The Covid-19 pandemic has left its mark on vocational education and training. Nevertheless, dual vocational education and training has proven its quality even in the crisis. Contrary to some fears, there has been no increase in the proportion of prematurely terminated apprenticeship contracts and no drop in the success rate in final examinations in 2020. This is shown in an analysis by the Federal Institute for Vocational Education and Training (BIBB).

The figures even show that for the first time since 2015, the contract dissolution rate has fallen significantly - in 2019 it was 26.9 per cent. Accordingly, the dissolution rate for 2020 was 25.1 per cent. The decline in the contract dissolution rate is evident in all regions, in most occupations and for all groups of people (men/women, apprentices with and without German citizenship and for all types of general school-leaving qualifications) (UHLY 2022b).

According to UHLY (2022b, p147), it can be assumed that in 2020, from the individual perspective of those who have obtained a training place, there is a lower chance of a change to a more preferred training place (fewer contact opportunities, restrictions with regard to business activities, uncertainties as to whether training companies are also still hiring, greater uncertainty overall with regard to future developments). Among the apprentices, there was probably a greater interest in maintaining an apprenticeship relationship under the given uncertainties, all other things being equal, even when there was some dissatisfaction or conflict. In addition, there was also a strong interest on the part of various players in the dual system (companies, chambers, associations, politics, etc.), who made considerable efforts to maintain apprenticeship relationships despite the more difficult conditions in the corona crisis.

The number of final examinations in 2020 remained almost unchanged compared to the previous year. The proportion of successfully passed final examinations among all examination participants also remained stable. In 2019, 92.8 per cent of the examination participants passed the final examination, in 2020 it was 92.3 per cent. The proportion of repeat examinations also hardly changed. In 2020, 6.8 per cent of all examinations were repeat examinations, in the previous year 6.4 per cent (UHLY 2022a).

However, a significant decline in the number of newly concluded training contracts was observed. Although in 2021 the number of apprenticeship places on offer within the framework of dual vocational training developed positively again after the considerable decline in 2020 and rose by 1.7 per cent to 536,200 places, it was still significantly below the level of 2019 (578,200) before the outbreak of the pandemic. By contrast, demand for training places fell again by 0.9 per cent to 540,900. By way of comparison, a total of 598,800 young people asked the Federal Employment Agency (Bundesagentur für Arbeit, BA) for a training place in 2019. This was 57,900 or 9.7 per cent more people seeking a training place than in 2021 (CHRIST et al. 2022).

The longer-term development of apprenticeship supply and demand shows that the declines in supply and demand can only partly be attributed to the Covid-19 pandemic and its containment measures. In the wake of declining numbers of school leavers in recent years, declining interest in apprenticeships and rising numbers of unfilled apprenticeship places, the apprenticeship market was already characterised by downward trends before the outbreak of the corona pandemic.

Conclusion

In Europe, there is currently no comparable data on early discontinuation of initial vocational education and training among the member states. There is also a lack of a common definition, which would need to be the basis of any data collection. In Germany, two indicators are used for monitoring in this area, the contract dissolution rate and the rate of unskilled young people, both of which, however, do not fully cover the dropout situation. For example, the dissolution of a training contract does not necessarily mean the end of training, but merely a change to another training company, to another form of VET or to higher education.

The measures to prevent premature contract termination make clear that these must be very much adapted to the respective organisation of the VET system, the risk groups and the existing national institutions. The offers for counselling and support of the apprentices are an essential focus, as well as the sensitisation of the educational staff. In Germany, the trainers in the companies play an important role and need to be empowered for these tasks. There are already numerous supportive offers available.

The reasons and factors influencing dropouts are manifold and need to be analysed and regularly surveyed to be able to respond accordingly. On the one hand, a lower general school leaving certificate, misconceptions about the occupation or not being able to find a placement in the desired one may increase the risk of dropping out of VET. On the other hand, good working conditions, the prospect of a good income and being taken on by the company at the end of the training reduce the risk of contract dissolution. After a contract is terminated, it is important that a change to another training relationship or another training programme is possible as quickly as possible.

The COVID-19 pandemic was also a challenge for vocational education and training. Both the training companies, the vocational schools and of course the apprentices themselves had to adapt quickly and flexibly to different measures to combat the pandemic. Overall, however, an effect on the contract dissolution rate is not discernible from the relevant data for the year 2021.

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