Apprenticeship-type schemes and structured work-based learning programmes

Germany
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Author(s): Kristina Alice Hensen-Reifgens

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Chapter A: Definition and statistics

The vocational education and training system in Germany assures the future of young people and of the German society. The dual system forms the core element of vocational training and is usually of three years’ duration. Every young person who has completed full-time compulsory school has access to dual training; there are no further requirements. This training pathway is characterised by two learning venues - companies and vocational schools. The dual system covers every sector and provides broad basic vocational training and imparts occupational competences in around 329 recognised training occupations (see Data Report 2014, p. 95). Training places are offered in public and private enterprises, in practices of the liberal professions and, to a very limited extent, also in private households.

The primary **aim of training** is to enable young people to acquire comprehensive vocational competences designed to make them capable of fulfilling their duties as employees efficiently, effectively and innovatively, autonomously and in cooperation with others. This bundle of competences must be demonstrated in examinations regulated by law (Vocational training act). Those successfully completed training are qualified to be **employed as skilled workers**.

Enterprises enter into a contract with trainees, they bear the costs of the in-company training and pay the trainee remuneration as regulated by collective agreement which increases with every year of training, and averages about one third of the starting pay for a skilled worker. The professional competences in occupations to be acquired in in-company training are specified in a training regulation and included by the training enterprise in an individual training plan. The binding requirements of the training regulations guarantee a uniform national standard\(^1\). For the teaching in the vocational school, a framework curriculum, harmonised with the training regulations, is drawn up for every recognised training occupation. The system is monitored by competent bodies such as the chambers or autonomous trade and industry associations. (Hensen/Hippach-Schneider 2013)

Vocational schools provide the theoretical knowledge and technical skills to support the training provided in the company.

While the federal ministry for education is in charge for companies as training places, the learning in vocational schools lies within the responsibility of the Länder (see chart 1)

\(^1\) For more information see Hensen/Hippach-Schneider 2013, chapter 3.
But what is the added value of the dual system from the point of view of the companies and why do they participate in it?

Enterprises engage in the dual system of vocational education and training because they want to secure their supply of skilled manpower and recognise the advantages of providing their own skilled worker training. They can train according to their own needs and demands and therefore contribute to the growth and innovative potential of the enterprise and also the economy as a whole.

In the year 2012, slightly more than half of all companies authorised to provide training did participate in dual vocational education and training, with the share of enterprises providing training rising with the number of employees (Data Report 2014, p. 199). While only 38% of the micro-enterprises have trainees, the percentage rises to 87% for medium-sized enterprises, and almost all large enterprises provide training to young people. (see Data Report 2014, p. 199)

Similarly, the rate of trainee hiring depends on the size of the enterprise. In other words, the larger the enterprise, the higher the probability of being hired after completing training. In 2012, only one training graduate in two was given a job in micro-enterprises, while the proportion of graduates subsequently hired was 64% in small enterprises, 70% in medium-sized enterprises and 79% in large enterprises (Data Report 2014, p. 201). Overall, two out
of three training graduates were taken on as employees in the year 2012 (Data Report 2014, p. 201).

<table>
<thead>
<tr>
<th>TYPE OF EDUCATIONAL PROGRAMME</th>
<th>MAIN ECONOMIC SECTORS</th>
<th>CORRESPONDING ISCED LEVEL AND ORIENTATION</th>
<th>BALANCE BETWEEN SCHOOL- AND WORK-BASED TRAINING</th>
<th>AVERAGE DURATION OF STUDIES</th>
<th>TRANSFER TO OTHER PATHWAYS</th>
<th>ADMISSION REQUIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational Training</td>
<td>In every sector</td>
<td>3B</td>
<td>In average: 4 days a week in company, 1 day in VET school</td>
<td>Mostly 3 years</td>
<td>Specialized upper secondary programmes (ISCED 4), further vocational education programmes (ISCED 5B)</td>
<td>Finished compulsory full-time education, but no further requirements for access</td>
</tr>
</tbody>
</table>

(Source: Hensen/Hippach-Schneider 2013)

In the year 2013, 562,200 training places were available nationwide, a decrease of 3.5% compared to the previous year. Of these training places offered, 542,500 were in-company training places (−2.9% compared to the year 2012). An overall decline in the number of apprenticeships offered was recorded in nearly all industry sectors. In particular in the manufacturing and commerce sector, the supply of training places has decreased compared to the previous year (−4.0%), while in the crafts the number of available apprenticeships declined by 3.0%. However, the demand for apprenticeships also declined nationwide by 2.1% (13,000) to 614,300. (see Data Report 2014, p. 9). Compared to the previous year, the number of newly concluded training contracts decreased in 2013 by 20,600 (−3.7%) to 530,700 (Data Report 2014, p. 9).

A likely reason for the decline is the demographic development and consequently the declining number of young people. Another reason could be the unattractiveness of some sectors like hotel and catering industry and home care. In 2013 there were 100 apprenticeship applicants per 91.9 vocational training places offered, a decrease of 1.3% compared to 2012. A share of 6.2% of the officially calculated supply of company training places remained unfilled (see Data Report 2014, pp. 9 ff). It is becoming increasingly difficult for the enterprises to find adequate apprentices and fill their training places. In particular in the crafts sector there are problems in filling all vacancies. In addition there are matching problems, meaning that, on the one hand, there are more and more unfilled training places and, on the other hand, more and more young people unable to find a suitable training place and therefore left without an apprenticeship.

Economic innovation demands a continuous adaptation and further development of occupations. For this reason a total 14 training occupations were restructured in 2013; 12
have been modernised and 2 new training occupations were created (see also Data Report 2014, p. 98).

The reform of a training occupation within the dual system in accordance with § 4 para. 1 of the Vocational Training Act (BBiG) and § 25 para. 1 of the Crafts and Trade Code (HwO) is initiated due to corresponding needs in the economy. The process is started in most cases by the trade associations, the top-level employers' organisations, the trade unions and the Federal Institute for Vocational Education and Training (BIBB).

If we take a look at the total number of apprentices in the dual system, we can observe a downward trend here as well. In 2012 there was a total of 1,429,977 apprentices, a decrease of 2.1% compared to the previous year. (Data Report 2014)

"Industry and commerce" was the sector with the highest number of trainees (841,062 people) in 2012, a decline by 1.1% compared to the previous year. In the crafts, as well, the number decreased by 3.4% to a total of 400,131 trainees. The liberal professions had 109,854 trainees in 2012, making it the third-largest sector. (see diagram 1)

Diagram 1: Trainees in the dual system by areas of responsibility in 2012.

(Source: Own illustration according to Data Report 2014, p. 104)

2 The highest number has been recorded for the year 2000 with 1,702,017 persons in training.
Chapter B: Specific features

Support for companies, in particular SMEs, offering company placements

Small and medium-sized enterprises, in particular craft trades companies, are important training suppliers, but are often unable, or not fully able, to provide all the facets of training required of them by training regulations. This is primarily due to the increasing division of labour in production processes, increasing specialisation, and in some cases financial problems or accelerated technological change.

The limited capacity of smaller enterprises as training providers may be compensated by supplementary external training measures such as Inter-company vocational training centres (überbetriebliche Berufsbildungsstätten ÜBS) or coherent training structures (Ausbildungsverbünde).

- Educational institutions may offer inter-company training periods (inter-company vocational training centres - ÜBS), to supplement in-company training. ÜBS are often sponsored by autonomous bodies in the relevant sectors, while the Federal Ministry for Education supports the sponsors with investment subsidies. The BIBB bears statutory responsibility for implementing the sponsorship.

- Enterprises may form coherent training structures (Ausbildungsverbünde). There are four traditional models:

  1. “Lead enterprise with partner enterprise” model (Leitbetrieb mit Partnerbetrieben): the lead enterprise bears overall responsibility for the training, but parts of it are conducted in various partner enterprises.

  2. “Training to order” model (Auftragsausbildung): some periods of training take place outside the regular enterprise, perhaps in a nearby large enterprise with a training workshop, on the basis of an order and against reimbursement of costs.

  3. “Training consortium” model (Ausbildungskonsortium): several SMEs work together and take on trainees. If one enterprise cannot obtain a specific content the trainee goes into the other enterprise (rotation principle). The enterprises also sign a cooperation agreement; they work together equally and train their own trainees independently.

  4. “Training association” model (Ausbildungsverein): individual enterprises establish an organisation for the purpose of the training, which takes over the organisational tasks (like contracts etc.), while the
master enterprises offer the training. The organs of the association are the general meeting and the honorary committee. A statute regulates rights and obligations of the members. (Hensen/Hippach-Schneider 2013)

Enhance programme attractiveness and career guidance

In order to enhance the attractiveness of dual training and to meet the demand of the industry for skilled workers, the BMBF (Federal Ministry of Education and Research) and the BMWi (Federal Ministry for Economic Affairs and Energy) initiated the information campaign "Vocational Education – Practically Unbeatable" (Berufliche Bildung - praktisch unschlagbar) (2011–2013) in the context of the programme of the National Pact for Career Training and Skilled Manpower Development (Nationaler Pakt für Ausbildung und Fachkräfte nachwuchs) (2010–2014).

The goals of the campaign are, on the one hand, to increase the attractiveness of the dual VET system by raising public awareness on the various opportunities of continuing education and training and, on the other hand, to stimulate interest in dual education among young and adult high-performers. (see Report on Vocational Education and Training 2014, p. 96)

Example: The institutional and home care sector in Germany is facing serious attractiveness problems. This is caused, in particular, by the comparatively low remuneration combined with physically and mentally demanding work and the necessity of working at least partially in shifts. For this reason, the Federal Government3 and the Länder and associations signed the agreements on the "Training and Qualification campaign for Geriatric Care" (Ausbildungs- und Qualifizierungsoffensive Altenpflege) at the end of 2012. The major objective is to bundle the forces of all policymakers in the geriatric care field in a joint initiative and to agree on concrete measures to strengthen initial, further and continuing vocational education and training and increase the attractiveness of the occupational and employment field of geriatric care. (see Report on Vocational Education and Training 2014, pp. 97 f)

Risk of high unemployment among school drop outs and students with poor performance, has led to a growing focus on career education, work preparation and initiatives easing the transition from school to work.

Germany's federal structure implies that responsibilities are divided between the Federal Government, the regional governments (16 Länder) and the local municipalities. In particular,

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3 The main responsibility was taken on by the BMFSFJ (Federal Ministry for Family Affairs, Senior Citizens, Women and Youth), and the BMAS (Federal Ministry of Labour and Social Affairs), the BMG (Federal Ministry of Health) and the BMBF (Federal Ministry of Education and Research) participate as well.
in the context of guidance provision and guidance policies, education, labour and youth ministries have also responsibilities.

In Germany the Public Employment Service and its local employment agencies (Bundesagentur für Arbeit – BA) are in charge of vocational guidance and counselling for youth and adults. The BA is the largest and most important provider of guidance and counselling services (http://www.arbeitsagentur.de).

Guidance and counselling services in the educational sector mainly focus on career education, advice on educational career paths or individual learning difficulties. The service varies between regions and schools. Following a formal agreement between the KMK and the BA there is a close cooperation between school career education and the career guidance service of the local employment agencies (KMK/BA 2004).

Career guidance is also an element of curricula in schools for general education. It is embedded in different subjects such as “work preparation” (Arbeitlehre), “economic and social affairs” (Wirtschaft und Sozialkunde), home economics, engineering, polytechnic education etc. Career education in class is normally supported by a career counsellor of the local employment Agency and supplemented, in classes 8, 9, or 10 by visits to the Career Information Centre, to enterprises, and by compulsory periods of work experience in enterprises lasting from one to three weeks.

In addition to the mainstream career education in schools, the Länder governments have launched special programs and funding for additional efforts to improve career management skills and career development of their students. Additional funding from the Federal Government and/or from the BA as well as from private enterprises, foundations or employers’ associations enables schools to carry out multiple guidance activities. (Hensen/Hippach-Schneider 2013, p. 42f)

Inter-company vocational training centres (überbetriebliche Berufsbildungsstätten - ÜBS) provide early, practice-oriented, systematic vocational guidance to make the transition from school to ‘dual’ vocational training easier for pupils at schools offering a general school-leaving certificate and to reduce early leaving from education and training. These vocational guidance measures give young people the opportunity to spend two weeks at a vocational training facility gaining practical experience in three occupation-specific workshops. A sustainable improvement of school-to-work-transition management should be the outcome (http://www.bibb.de/berufsorientierung). (Hensen/Hippach-Schneider 2013, p. 43f)

By 2010 the program has been stabilised. The Federal Institute for Vocational Education and Training (BIBB) organises the funding on behalf of the BMBF. In 2012, 300 projects involving 185,000 pupils were approved. (Data Report 2014, p. 148)
The programs “Educational Chains” (Bildungsketten) and “Job Start Coaches” (Berufseinstiegsbegleiter) provide students at risk with individual support for the transition from school to vocational training and work. In the field of the transition from school to work another program called “Regional Transition Management” (Regionales Übergangsmanagement) focuses on the transition from school to vocational training of young people with difficulties. The program matches the demand of enterprises and school leavers in order to provide training opportunities for all. (Hensen/Hippach-Schneider 2013, p. 42f)

National governance, regulatory framework and social partners' involvement

VET in Germany is based on cooperation between state, private sector and social partners. The Federal Ministry of Education (BMBF) is responsible for general policy issues of VET and coordinates and steers VET policy for all training occupations in cooperation with the respective ministries. The Ministry also works closely together with the Federal Institute for Vocational Education and Training (BIBB) who conducts research, advises the Federal Government and vocational training providers. The Länder (federal states) have committees for vocational training with employer and employee representatives and are responsible for school education. The Länder Ministries of Education cooperate in a Standing Conference (KMK) to ensure a certain degree of uniformity and comparability. KMK recommendations only become legally binding when passed by individual Länder parliaments.

Furthermore the organisation of dual training requires a complex but clear division of responsibilities. Employers and unions play a central role in initiatives for change because the structure of vocational training must meet the demands of industry. If there is a need for changes – in the qualification requirements, for example – the Federal Government, the Länder, the industry and the trade unions agree on the basic principles for adaptation. Then the work on the training regulations and framework curricula is continued and constantly coordinated by the individual partners involved. Without the involvement of the Federal Government, the social partners furthermore agree on details of vocational training. As self-governing bodies of industry, the chambers have been assigned public tasks in dual training (competent bodies). These include counselling and monitoring functions with regard to the individual training contracts. Training advisers of the chambers verify the aptitude of companies and instructors for providing training and advise both companies and trainees. (Hensen/Hippach-Schneider 2013, p. 13f)
Quality assurance in work-based learning and/or apprenticeship

In Germany there is a system of recognized training occupations or vocational education and training (VET) standards. The German term “Ausbildungsberuf” (training occupation) describes a key element of the training and education system which comprises a vocational education and training standard, occupational characteristics, a training plan of two or three years and a qualification frame. The standard defines the context and time frame of the training courses for the state-recognised occupations, like training specifications and assessment requirements. The Federal-Länder Coordination Committee for Vocational Training Regulations / Framework Curricula finally approves the new vocational training regulation and the framework curriculum that has been coordinated with it. Employers and trade unions jointly formulate the employment requirements for the standard. In the practice of vocational training, all cooperation is based on consensus; no regulations concerning initial or further vocational training may be issued against the declared will of either of the social partners. Thus, initiatives for vocational educational reforms either stem from the social partners or have to meet with their acceptance. (Hensen/Hippach-Schneider 2013, p. 30f)

In addition, the enterprises are informed by the schools or the vocational school teachers about the school performance of their trainees.

The training contract between the company and the trainee also defines their respective rights and obligations, thereby providing yet another way of assuring the quality of training. The training pay gives the trainees an additional incentive to be committed and actively involved both at vocational school and in the enterprise. Another internal quality assurance tool are the report books kept by the trainees and signed by the trainers at regular intervals. These report books contain descriptions of the work performed in the company and the (vocational) school. Finally, prizes and awards identify "best practice" examples and innovative models of vocational education and training and concurrently help in assuring and improving quality.

The Hermann Schmidt Prize

In 1996, the association „Innovative Berufsbildung e. V.“ was founded. The aim is to initiate, promote and communicate innovative developments in VET practice. Since 1997 the association annually awards the Hermann Schmidt Prize in order to honour special achievements from selected areas of vocational training.
Chapter C: Main strengths and weaknesses

The central characteristic of the German dual system of vocational education and training is the close partnership between employers, trade unions and the government. The employers and the unions assume responsibility through their co-determination in the shaping of vocational education and training. The willingness of the enterprises and companies to take responsibility could not be realised without co-determination. This connection forms the basis of a working "public private partnership".

This partnership-based design and structure entails in particular the following strengths:

The dual system links theory and practice in a variety of ways and thereby ensures a good combination in the imparting of occupational skills and key qualifications. The objective of training is the acquisition of professional action competence, i.e. a broadly based qualification instead of a narrow learning of specific activities.

It allows for quick implementation of new skills requirements into the training processes, in particular due to the fact that employers' representatives and trade unions are involved in the process of developing training regulations (TRs). The renewal of existing TRs and the development of new TRs are usually initiated by the social partners. In the companies, the trainees learn by using and applying the latest technologies.

This makes the transition from training to regular employment easier, on the one hand, by letting the trainees acquire practical experience in their occupation and allowing them to become familiar with the world of work and, on the other hand, by providing the companies with sound knowledge about the skills of the trainees. After completion of training, the companies therefore can take on a qualified skilled worker who can be integrated into the company processes immediately.

Public and private sources cooperate in the funding of vocational education and training.
Weaknesses

The transition into vocational education and training can turn out to be difficult for some young people. The prerequisite for training in the dual system is a contract with a training enterprise. The supply of training places and the demand together form the so-called “training place market”. Like other markets, such as the labour market, the training place market is characterised by competition. For example, the companies compete in their search for the best and most fitting apprentices. On the other hand, there is also competition between the training place seekers.

The companies select those applicants who best meet their expectations. This can sometimes make the transition into training complicated for young people with poor grades or without any school-leaving certificate. For this reason, state-funded support and transitional measures are offered for these people.

On the other hand, companies face increasing difficulties in filling their training places. There are various reasons for this. They include, for example, demographic development\(^4\), but they also include the unattractiveness of certain industry sectors\(^5\) and occupations, considered unattractive because of the wages or working conditions.

Wide regional variations in the apprenticeship market situation are possible.

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\(^4\) This can be observed, in particular, in the institutional and home care sector. The number of people in need of care is increasing, as is the complexity of providing for them. At the same time, the number of school leavers available for a course of training is continually decreasing. The relevant courses of training are therefore to be revised in a new nursing and care occupations bill.

\(^5\) E.g. in the hotel and catering industry
Chapter D: Conclusions

The German model of dual vocational education and training is based on broad consensus in the society as a whole. It has great prestige, and constitutes an educational pathway that is still chosen by more than 50% of the young people in each age cohort. Dual vocational education and training is a crucial basis of innovation, financial success and economic growth in Germany.

The linkage to the labour market and the participation of the enterprises in training, in particular, are essential success factors. In the context of the anticipated skilled worker shortage, especially at the medium qualification level, the dual system of vocational education and training could help to fill this gap. In this way, companies would be enabled to train their skilled workers corresponding to their economic requirements in a practice-related way. For young people, vocational education and training is a prerequisite for social participation and the expansion of their independence. Positive effects can therefore be observed at the individual level as well.

Vocational education and training is shaped by the cooperation of the participating stakeholders. Assuring its quality and improving its attractiveness are key objectives. The dual system of vocational education and training in Germany is therefore characterised, in particular, by its corporatism and the division of educational policy responsibility between the Federal government, the Länder and the social partners.
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