



Federal Ministry
of Education
and Research

Dual Training at a Glance

An illustrated introduction

– additional information –

(text arranged according to slide numbers)

1. Federal Ministry of Education and Research (BMBF)

In the German Federal Government, the Federal Ministry of Education and Research (BMBF) is responsible for general policy issues of vocational education and training. These include for example:

- the Vocational Training Act (Berufsbildungsgesetz, BBiG);
- the Vocational Training Promotion Act (Berufsbildungsförderungsgesetz, BAföG);
- the drawing up of the annual Report on Vocational Education and Training;
- the legal supervision and funding of the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung, BIBB);
- the implementation of programmes to improve vocational training.

The recognition of the individual occupations requiring formal training is the task of the federal ministries responsible for the respective occupational field. In the vast majority of cases, responsibility lies with the Federal Ministry of Economics and Technology (BMWi). But approval by the BMBF is required in all cases. The BMBF thus fulfils a coordinating and steering function in terms of vocational training policy for all training occupations whatever the ministry responsible for the occupational field in question.

2. Dual Training

The name illustrates the principle:

Two partners share the responsibility for vocational education and training: A company concludes a training contract with a young trainee and assumes the responsibility for teaching the required training contents. The company organizes learning on an average of three or four days per week on the basis of a training plan, which forms part of the training contract concluded with the trainee.

2.1 Learning in the company

Training is mainly provided at the workplace, that is, during work. This is the central point in which the German dual system differs from the school-based training models of other countries: In-company training familiarizes the trainees with the technological and organizational aspects of the current work processes in companies. In addition, trainees contribute to the company's productivity during their training, which reduces the overall cost of vocational training for both the companies and society at large.

2.1.1 Training Regulations

Training in the company is based on training regulations which the Federal Government has issued for each training occupation. These regulations stipulate inter alia the minimum vocational skills which must be taught as well as the examination requirements. This ensures a similar or comparable level of training and examinations in a specific occupation throughout Germany. Transparency on the labour market can thus be increased for both employers and employees.

2.1.2 Training contract

Training in the company is provided within the framework of a contract which is based on general labour law and includes some special provisions. These contracts are subject to legal control by the competent public agencies (in most cases the chambers). The contracts concluded between the companies and the trainees can only become effective if they are approved and registered by these agencies.

In the contract, the company undertakes to ensure that all the training contents stipulated in the training regulations is actually taught.

The company can only terminate the contract in exceptional cases after the probationary period has expired. If the trainee does not pass the final examination, the training contract is extended until the next final examination – for one year at the most – at the trainee's request.

The training period can also be extended under special circumstances if this is the only way to ensure that the training objective can be achieved. The criteria for shortening the training period are in particular special previous knowledge acquired at work or school or above-average performance during training.

2.2 Learning at school

Trainees attend part-time vocational school on one or two days per week, where they are mainly taught theoretical and practical knowledge related to their occupation; in addition they attend classes on general subjects such as economic and social studies and foreign languages. Systematic teaching at vocational school is a necessary supplement to process-oriented training in the company which is rather more based on specific in-house requirements.

2.2.1 Curriculum

Teaching at part-time vocational school takes complex processes into account as well: Theoretical contents is therefore not taught in isolation but within the framework of so-called fields of learning, and is related to work in the respective occupation wherever possible. This approach is also used in classes on general subjects if possible.

3. From school to work

There are three pathways of vocational training in Germany. Full compulsory education is required for entering such training, that is, candidates must have spent a minimum number of school years (ten as a rule) in general education, which is the sole responsibility of the Länder.

3.1 General education

The Länder bear sole responsibility for school education in Germany. For this reason, there are different types of school. However, the Länder agree on general standards so that transfers are possible and final qualifications are generally recognized.

3.2 Dual training

Most school leavers (more than 60% of an age group) embark on dual training. For that purpose, they conclude a training contract with a company. They train in the company and at the same time attend part-time vocational school in order to qualify for one of the about 349 nationally recognized training occupations within the prescribed period of two, three or three and a half years.

Apart from completing compulsory education, there are no formal schooling requirements for entrance to dual training. The candidates' schooling background is, however, an important criterion for most companies when selecting their trainees.

Specific tools are available for providing guidance and supervision during training. The decisive factor, however, is the final examination administered under public law. As companies see dual training as an investment, they are interested in ensuring that their trainees are successful. Candidates who have passed the final examination are awarded a certificate (a Gesellenbrief in the skilled trades) which testifies to the successful completion of training in a state-recognized training occupation.

3.3 Full-time vocational schools

On the basis of federal or Länder law, full-time vocational schools (Berufsfachschulen), for which the Länder are solely responsible, offer training programmes which lead to recognized occupations. These include occupations in the health and laboratory sectors in particular. The training may include company placements, and covers a period of two or three years depending on the respective occupation.

Admission to a Berufsfachschule in most cases requires an intermediate school leaving certificate (mittlere Reife). Final qualifications are awarded on passing a school examination which is supervised by the education authority and governed by the regulations of the respective occupation.

3.4 Higher education

Universities and universities of applied sciences offer a variety of study programmes. Only some of them prepare students directly for a certain occupation. The aim is rather to provide students with a scientific basis for gainful employment later in life.

People who want to enrol at a university must furnish proof of their general or subject-restricted higher education entrance qualifications which they have earned in general education (at a grammar school or specialized upper secondary school (Fachoberschule), for example).

The standard period of study is three to five years and, in some subjects, includes a company placement. In the course of European harmonization (Bologna Process), most Diplom and Magister Artium degrees have been replaced by Bachelor's and Master's degrees. This does not refer to qualifications which are not awarded by the universities alone but prepare students for certain state-controlled occupations or those in the public sector and take the form of state examinations (Staatsexamen). These include, for example, medical doctors and lawyers.

4. Training occupations – an overview

Dual training aims to enable people to work independently in a specific occupation. Completion of a relevant training course is the criterion usually applied when staff is recruited for a job and the salary fixed. Vocational qualifications are considered proof of the skills needed for the respective job.

4.1 Training occupations for every sector

There are state-recognized training occupations in all sectors of the economy and administration – from agriculture to manufacturing to the public sector.

4.2 Changes in training occupations

The current 349 recognized training occupations are continuously updated, as necessary. Furthermore, new training occupations are recognized by the state in areas where this is required by current developments in the world of work, for example, new technologies (microtechnologist) or in expanding fields of employment with a specific occupational profile (Fachkraft für Schutz und Sicherheit /safety and security specialist).

Source: Calculation by the BIBB

4.3 Training occupations show different degrees of specialization

Training in many of these recognized occupations qualifies people for work in different fields and thus opens up employment opportunities in various branches. Mechatronics technicians, for example, can work wherever mechatronics systems are produced or maintained (in such fields as machine tool making, rail transport, elevator maintenance, waterworks, and others). However, some training occupations qualify people for very specific jobs.

For example, custom tailors exclusively produce customized clothes for men and women.

4.4 Differentiation

Training in the recognized occupations generally covers a broad range of skills which enable people to carry out different activities within the relevant occupation. However, as the number of occupation-specific activities varies from one occupation to another, differentiation of training in these occupations must vary accordingly. For example, opticians are generalists in their trade and learn all relevant skills. Laboratory technicians, on the other hand, specialize already during training by choosing optional modules. Another kind of differentiation can, for example, be found in the training for wholesale and foreign trade clerks, where trainees must choose one of two branches.

4.5 Vocational competence

The aim of all training regulations is to ensure vocational competence. It is therefore not sufficient to teach only specialized skills. Vocational competence also includes the ability to plan, carry out and supervise work independently, which is generally termed methodical competence. Furthermore, graduates of dual training must also be able to interact adequately with colleagues, supervisors and customers, that is, they must have social skills.

5. Arguments in favour of dual training

The predominant role which the dual system of training plays in Germany is mainly due to the system's many advantages for those involved.

5.1 Advantages for industry

Provision of in-house training contributes to the systematic and long-term personnel development in companies, which as a result remain largely un-affected by fluctuations on the labour market. Recruitment of external skilled labour would be more expensive and more time-consuming. Training in the company furthermore helps minimize the risk of hiring the wrong person for the job, with all the additional cost this would entail.

Graduates of dual training are familiar with company processes and have worked together with company staff for several years. They are qualified for their specific job and usually show an aboveaverage loyalty to their company.

Furthermore they contribute considerably to corporate value creation while training in the company.

5.2 Advantages for young people

But the young people also benefit from dual training. The certificate they are awarded attests to vocational qualifications which are recognized throughout Germany and give them a competitive advantage over graduates of non-company training programmes due to the practical orientation of dual training.

Graduates therefore have good prospects on the German labour market if they want to transfer to another employer.

Last but not least, the allowance which trainees are paid during dual training provides for a certain degree of independence.

6. Division of responsibilities in dual training

The organization 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 and industry 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.

6.1 Federal framework legislation

Action by all stakeholders in dual training (Federal Government, Länder and industry) is governed by the federal framework provisions of the Vocational Training Act (BBiG). In addition, certain labour law provisions in different fields of law are also binding on initial and continuing vocational training.

For example, the legal provisions and rules governing work contracts are also applicable to training contracts unless otherwise specified in the BBiG.

6.2 Federal Government

The Federal Government is responsible for designing the content of training for the occupations it has recognized unless training is entirely school-based. The nationally binding recognition of the training occupations ensures that the basic principles agreed with industry and the Länder are taken into account and that training for a recognized occupation is only provided in accordance with the training regulations adopted by the Federal Government.

The Federal Government's responsibilities are not limited to implementing what was jointly agreed: it also takes measures to promote dual training.

These measures include not only individual support programmes like those stipulated in the Federal Training Assistance Act (BAföG) but also special funding programmes which aim, for example, at creating additional training places in less favoured regions.

The Federal Government provides funding for special research projects to ensure the constant updating of vocational training. The objectives of vocational training research are in particular to establish a basis for vocational training, monitor national and international developments, identify training requirements in terms of goals, content, structures and methods, and test the developed models under practical conditions.

6.3 Länder

The Länder are fully and solely responsible for school education. In dual training this means that – after coordination between the Länder and with the other stakeholders in dual training – each Land drafts the curricula for instruction at part-time vocational school for the training occupations in question.

Furthermore, the Länder supervise the activities of the chambers.

6.4 Industry (Employers and unions)

The proposals submitted by industry for the development or revision of training regulations are taken up by the Federal Government if they have been agreed between employers and unions.

Without the involvement of the Federal Government, the social partners agree on further details of vocational training, particularly the amount of the allowance paid to trainees, within the framework of free collective bargaining. Some collective agreements also include provisions concerning such points as continued employment of training graduates under a limited contract.

6.5 Industry (Self-governing bodies (chambers))

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. They receive the training contracts and check and register them.

The chambers take care of the overall organization of examinations by fixing dates and setting up examination boards which administer the examinations. Furthermore, the chambers issue the certificates which are awarded to successful candidates.

The examination boards are composed of representatives of employers, employees and vocational schools.

The chamber sets up a vocational training board which must be consulted in important matters of vocational training. It is composed of equal numbers of representatives of companies, unions and – in an advisory capacity – part-time vocational schools.

7. The history of vocational training

Dual training in Germany has a long history. In the distant past, of course, training took place in the company alone. The dual system began to take shape when compulsory school attendance was introduced. Efforts to provide systematic training were already made in the Middle Ages in the area of the skilled crafts and trades. The Vocational Training Act, which was adopted in 1969, introduced a national legal framework for the different traditional training paths in the skilled trades and in industry and commerce.

7.1 Ancient times

Crafts and trades already developed in ancient times as societies became increasingly differentiated, and still exist today in one form or another. Such ancient crafts and trades include farmers as well as stonemasons, carpenters and potters. The basic working tools have been used for many centuries in these traditional trades and crafts but meanwhile modern processes and techniques have also become part of work in these occupations.

7.2 Middle Ages

In Central Europe, the first guilds were formed in the 12th century. The functions of these guilds were similar to those of today's trade guilds and Chambers of Crafts. The first attempts to provide systematic training also date far back into the Middle Ages.

Unlike today, parents formerly had to pay the master an apprenticeship premium.

7.3 1869

The Trade Regulation Act, which was adopted in the North German Confederation in 1869 and then incorporated into the laws of the newly emerging German Reich, is still largely applicable today. Its provisions include inter alia the freedom of trade – that is, the possibility to establish businesses even outside the legal framework governing crafts and trades.

A kind of compulsory vocational school attendance was introduced for workers under 18 years of age. Although this did not yet mark the beginning of industrial vocational training, it made sure that young factory workers with a poor education acquired at least a basic knowledge in such subjects as reading, writing and arithmetic, which was increasingly required for work in industry.

7.4 19th century

The emerging industrial sector increasingly required skilled labour which the crafts and trades could not supply. Large companies – mainly those in the metal industry – therefore founded their first own training workshops. They are the origin of today's industrial training and company training workshops.

7.5 1897

As a result of the freedom of trade granted by the 1869 Trade Regulation Act, a new legal framework had to be provided to secure the existence of the trades and crafts. This was achieved by the Craftspeople Protection Act of 1897. Its provisions governing the crafts and trades already included the supervision of apprenticeship training and are still applicable today.

7.6 Around 1920

The growing industrial companies found that the commercial skills their workers needed were not sufficiently taught in the existing trade schools. So the first commercial occupations were created.

7.7 Since 1969

The existing rules governing vocational training, which often differed from one region to another and did not have legal status, were incorporated into national law in 1969. In view of the long tradition of crafts and trades, the Crafts Code remained in force but its provisions regarding training were amended to match the provisions of the Vocational Training Act. The Vocational Training Act was repeatedly amended – for the last time in 2005.

8. Facts and figures

Dual training in Germany is characterized by a number of special features by which it differs from other forms of vocational learning in other countries.

8.1 A majority of young people learn in the dual system

The majority of general school leavers embark on training in the dual system. They accounted for 68% in 2008. This corresponds to a total number of approximately 1.6 million trainees. About 600,000 training contracts are concluded each year.

Source: Data Report supplementing the Report on Vocational Education and Training for the Year 2010

8.2 Open access

There are no minimum requirements for the conclusion of a training contract under the dual system as long as the requirement of full-time compulsory education is met. The schooling background of trainees therefore varies. Most of them (43%) have acquired an intermediate school leaving certificate, about 4% of the trainees have no school leaving certificate whatsoever, while 21% have even acquired higher education entrance qualifications.

Source: Data Report supplementing the Report on Vocational Education and Training for the Year 2010

8.3 Financing of dual training

The companies which provide training contribute the largest share to the financing of dual training. After deduction of the trainees' productive contribution, the companies bear an annual net cost of approximately €5,6 billion. The Länder spend roughly €2.9 billion each year on the equipment and operation of part-time vocational schools. In addition, federal funds and contributions from the Federal Employment Agency are provided to promote vocational training, for example, via funding of structural programmes or individual training support.

Source: Data Report supplementing the Report on Vocational Education and Training for the Year 2010

8.4 Dual training secures employment

Successful graduates of dual training have good chances of finding gainful employment after passing their final examinations.

Many trainees are offered an unlimited work contract by their own training company. Some trainees conclude a work contract with another company before taking their final examination or they embark on further training. Some collective agreements stipulate that a limited work contract of at least six months' duration must be concluded with training graduates.

Even training graduates who register for work at the employment agency have good chances of finding a job within a short period of time. Many of them actually find employment in the year in which they have completed their training as can be seen from the diagram. Statistics also show a steadily low employment rate of 3-4% among this group in the following years.

Source: Ralf Dorau et al: Berufliche Entwicklungen junger Fachkräfte nach Abschluss der Ausbildung. BIBB 2009