

How Can Professional Education Be Organized?

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How Can Professional Education Be Organized?

Deutsche Stiftung für internationale Entwicklung



von
by

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1. How is professional education anchored within the educational system?

Guiding questions

- Has professional education only a subordinate function, or on what is it dependent?
- What objectives does professional education pursue, and where are these objectives recorded?
- How can professional education be delimited outwardly from other fields of education, and how can it be inwardly subdivided?
- What legal foundations does professional education have, and what body is responsible?
- How can the structures of educational systems be represented and compared?
- What starting points and origins does professional education have, and what trend may be seen for the future?

1.1 Fundamental educational statistics

Demographic development and compulsory education

The demographic development of a nation and the actual implementation of existing periods of compulsory education are governing factors in the quantitative development of an educational system. Both are naturally different from country to country. Comparative analyses are only possible by giving relative data.

Conditions in the Federal Republic of Germany:

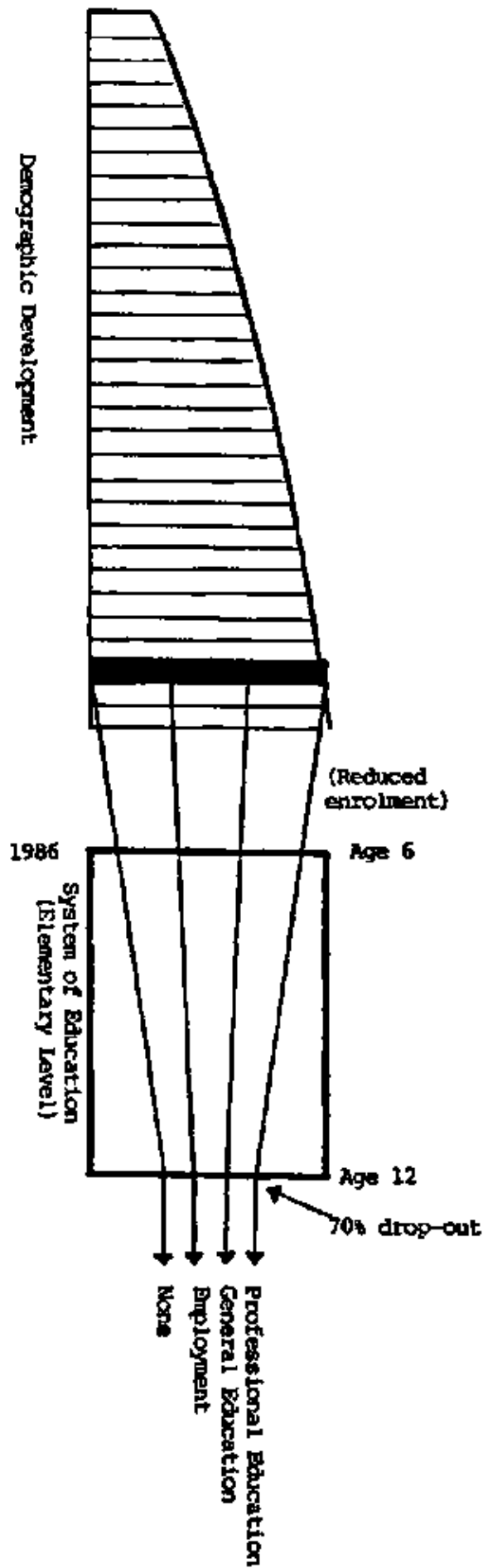
This can be made clear, using the example of the Federal Republic of Germany. Here, details are regulated by the Law to Promote Professional Education, dated 23.12.1981. According to this Law, specific data are collected every year, on apprentices, trainers and participants in examinations. Such statistical data form the basis for planning professional education. They contribute to ensuring that training centres have a qualitatively and quantitatively adequate supply of training places depending on their nature, number, size and location, and that they can also be used as favourably as possible in the long term.

... professional education statistics and professional education planning

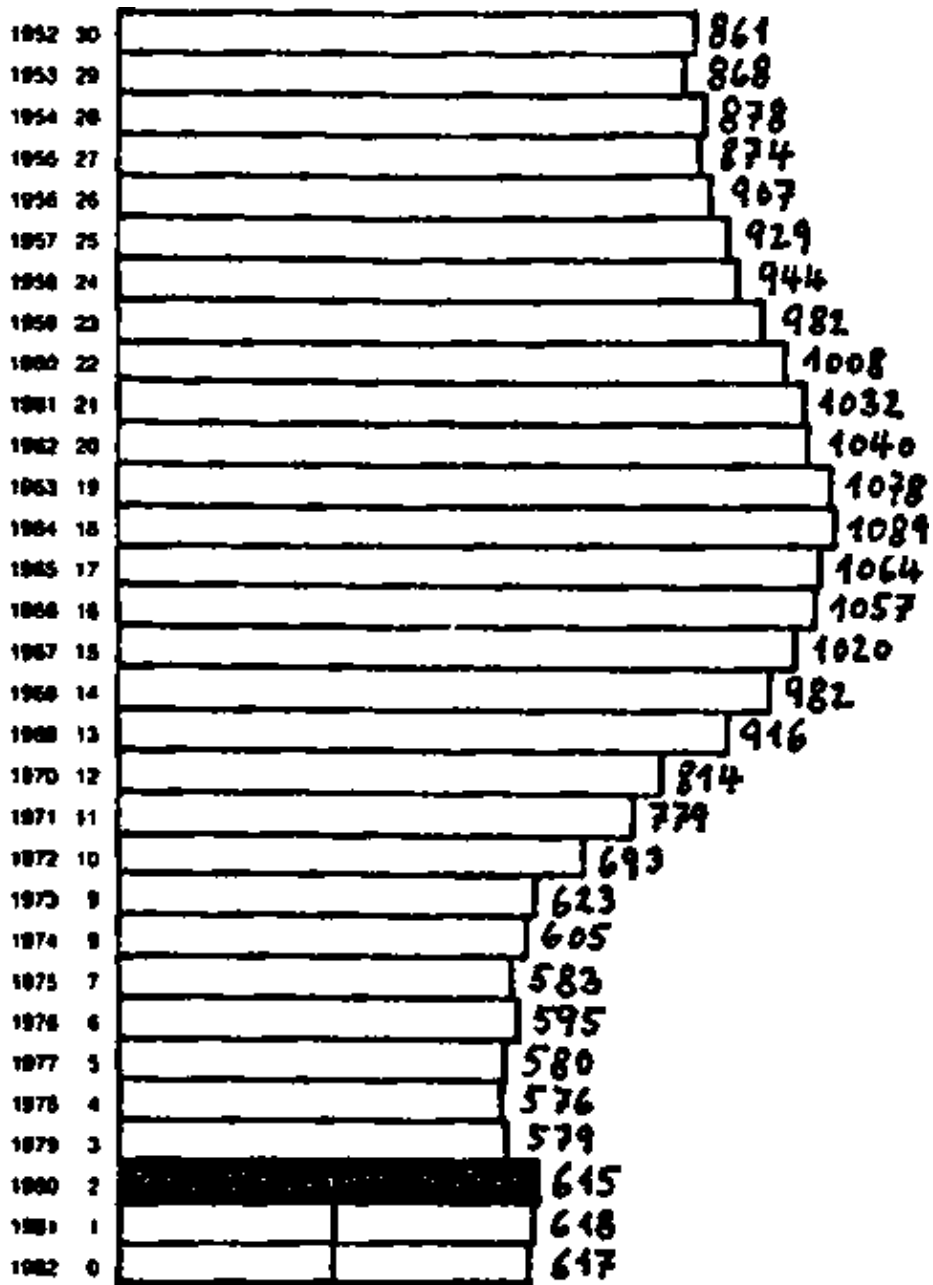
... birth rate

The birth rate in the Federal Republic has displayed a rapidly falling trend since approximately 1966, as the

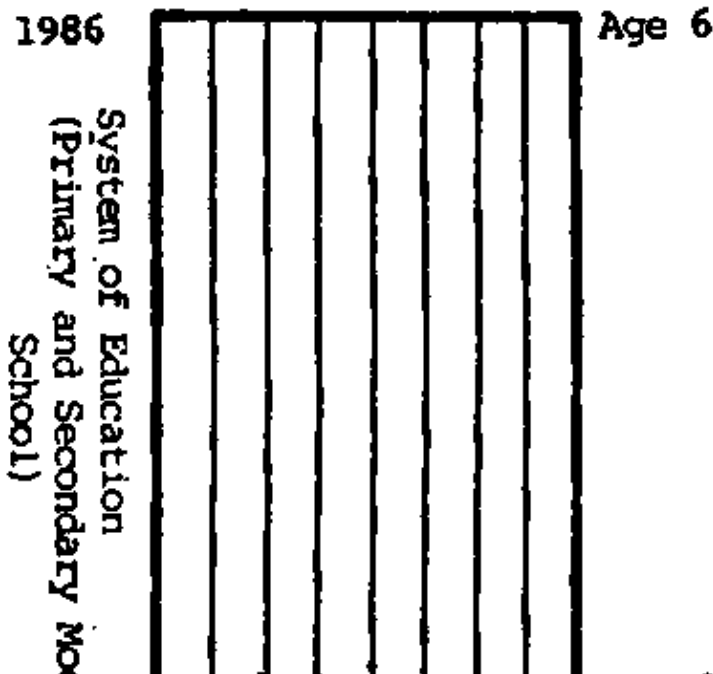
following diagram shows.



Federal Republic



615
(100% enrolment)



... compulsory education

... school drop-outs

Compulsory education in the Federal Republic begins at the age of 6, and mainly lasts for 10 years (exceptions 9 years). Those boys and girls entering the system of education in 1986 were thus born 6 years ago (1980). As the number of "school drop-outs" remains negligibly small in the course of 9 years of compulsory general education, those young people who need to be provided with professional education will also be recruited from this age-class. Admittedly, these will only comprise those 15-year-old boys and girls who do not decide to continue with general education or to enter employment. There is also the problem group of young unemployed persons, which is proportionally small in the Federal Republic when compared internationally.

In a very rough and simplified fashion, the situation may also be presented in such a way that it can be compared with developing countries, which are frequently not able to provide reliable statistics on professional education.

Conditions in developing countries:

... are the reverse

The basic pattern in considerations of educational statistics only applies very limitedly to developing countries: "Of 100 children entering the primary school, only 20 complete schooling" (PEARSON 1969, p. 92). Whether all pupils enter the primary school, as the existing system of compulsory education demands, remains open. In rural areas, it is far less so than in urban conurbations. Above all, there is a lack of teachers here to implement the existing system of compulsory general education. In addition, the birth rate is not falling in developing countries, but rising. This leads us to the conclusion that, from the standpoint of educational statistics, developing countries should take the following measures if they wish to raise the level of general education to a level which is comparable with that of industrial countries:

- 100% enrolment rate
- reduction in the proportion of school drop-outs
- extension of compulsory education

... raising of the general level of education is necessary

A drop in the birth rate should allow this aim to be achieved with greater ease.

1.2 Aims of professional education

Aims are essential

It is essential to determine aims for the concrete organization of the contents of professional education. It is therefore logical for more or less comprehensive information to be contained on this subject in the laws of many countries. The discussion, which is by no means complete, shows that the aims of professional education are particularly associated "with structures and processes in the working world ... analysis of the relationship between the system of education and that of employment, for example by research into qualifications, has nevertheless so far only been very inadequate" (LIPSMEIER 1982, p. 234). The following four main areas can be determined within the wide spectrum in which aims are formulated:

- development of personality
- requirements of the profession and of the labour market
- social requirements
- possibilities for further training

4 main areas

The aims are sometimes even formulated at the highest legal level, in the constitution of a country. They are more frequently embodied, however, in legislation.

Aims in Switzerland

Thus, for example, the Swiss Federal Law on Professional Education, dated 19.4.1978 (Article 5) maintains in remarkable precision, worthy of emulation: "Basic professional training shall impart those skills and that knowledge necessary to follow a profession. It shall extend general education, and promote the development of personality and a feeling of responsibility. In addition, it shall form the basis for further technical and general education."

In industrial countries, aims are formulated with reference to a homogenous target group. The majority of those young people entering the system of professional education has a high minimum level of general education. This makes it simple to formulate a uniform aim for professional education.

Three target groups in developing countries

This is completely different in developing countries. Here, in a simplified form, three extremely different groups may be found (NÖLKER and SCHOENFELDT 1982, p. 113):

- Urban population with a large proportion of illiterates (primary school-leavers)
- Population in small towns with many semi-illiterates (Out-of-School-Youth)
- Rural population, predominantly illiterate

MES/ILO

The aims of professional education in industrial countries can at best be adopted for the urban population of developing countries. And yet this is only the smaller proportion of the total population. For the greater portion, i.e. for the illiterates and semi-illiterates, the MES (Modules of Employable Skill) approach to professional education by the International Labour Organization (ILO) is of major importance. This concept of professional education produced for developing countries is fully adapted to the situation in such countries. Its main aim is to adapt training measures to the specific requirements of the system of employment and to the individual possibilities of apprentices.

MES training may be sufficient as a first step; nevertheless, long-term training measures, on the pattern of industrial countries, should be built on this. Above all because one might otherwise become used to the low level of general education in developing countries, which would be a catastrophe for the development of the personality of the individual and for reasons of economic policy.

1.3 Concept and standing of professional education

Outward distinction

UNESCO/ISCED

Professionally oriented education (or professional education) is a familiar concept in all nations. Nevertheless, its contents are interpreted differently. In the first instance, it is necessary to make a clear outward distinction, i.e. to distinguish between the concepts of professional and general education. The "International Standard Classification of Education" (ISCED), published by UNESCO, here provides assistance. This is a classification of programmes of education, including both school and out-of-school education. The individual programmes are classified into 9 levels and 22 fields. ISCED has been developed for the whole world, including developing countries.

Statistical definition of professional education

The Statistical Office of the European Communities has suggested the following general definition for professional education, which agrees with the ISCED definition of education: "Professional education is systematic and continuous communication, with the aim of imparting the particular information, knowledge, insights, attitudes, skills and abilities which are required for a profession".

Internal distinction

Internally, the Statistical Office proposes making a distinction between initial professional training and adult professional training. This depends on whether the persons to be trained are younger or older than 21 years

of age at the start of such measures.

Differences from one country to the next

This systematic distinction according to age is only statistically simple; it is materially illogical. Nevertheless, different opinions probably exist from one country to the next on what is to be included in professional education, and how it is to be sub-divided. It is only important that this be clearly expressed in legal regulations. This is particularly true if comparisons are to be made between countries on an international level.

Experience made in Federal Republic of Germany

The experience we Germans have made with the Vocational Employment Act of 1969 may show one way in which the concept and standing of professional education are to be seen (§3 of the Government Amendment of 1975 to the Vocational Employment Act of 1969):

"(1) Professional education as defined in this Act is professional training and further professional training.

(2) Professional training is that section of professional education which generally leads to an initial certificate of professional training. It can also lead to a certificate in further professional training or to a part-certificate in training.

(3) Further professional training is that section of professional education which generally presupposes a certificate in professional training or professional employment.

(4) Professional education, as part of the educational system, shall be coordinated in planning and organization with general and professional education in schools, universities and other public educational institutions."

1.4 Legal foundations

Not an essential condition

The existence of legal foundations is not an essential condition for conducting professional education. Just as the desired professional education does not conversely come about automatically by the creation of legal foundations. Professional education in the Federal Republic had been in existence for a very long time before the Vocational Employment Act was passed in 1969, in which professional education was first given its uniform legal basis throughout the Republic.

Example of Turkey

In Turkey, the Act for Apprentices, Journeymen and Master Craftsmen was passed in 1977, following the Act of the Federal Republic, in the hope that the system of professional education there would develop as far as possible in accordance with the German pattern. However, no success worthy of note has so far been recorded.

Example of Brazil

On the other hand, Brazil has proved that systems of professional education can very well be successfully introduced by law, if certain conditions are first created. This primarily includes a broadly based and predominantly harmonious discussion among all those involved before passing legislation.

Level of development and legal foundation

The higher the level of development in professional education in a country, the more it is seen to be necessary to give legal foundation to the system. This has led to a multitude of legal regulations in developing countries, particularly in Latin America, which have partly even been included in constitutions. Apart from constitutions, these mainly consist of laws, orders, guidelines, agreements and contractual collective agreements. Even a fleeting glance at many of the existing regulations frequently reveals dichotomies. A few areas requiring regulation are not even included in many countries, such as, for example, trainers in the Education Act of 1972 in Peru, although the main role was correctly assigned by law to

out-of-school professional education. Other areas, in contrast, for which there is absolutely no need for legal regulation, have been overemphasized.

Model vocational training act

The model for a vocational training act, which might here be of assistance, still has to be found. The 1975 Amendment to the Vocational Training Act in the Federal Republic of Germany has occasionally been seen in this role.

The following outline shows a number of selected central provisions and details.

Provision

Provision	Details (Excerpts)	Paragraph,
Professional Education in Educational System	Aim, Concept and Standing, Places of Learning	2 – 4
Professional Training	Principles and classification, training professions and regulations, training centres, training staff, supervision, examinations, certificates, legal relationships of those involved, catalogue of professional training relationships.	5 – 46
Further professional training, correspondence courses	Approval of measures, contents of further training regulations, certificates, regulations of correspondence courses.	47 – 57
Special regulations for individual areas	Handicapped persons, shipping, educational aid, prisons	53 – 73
Planning and Statistics	Purpose and execution, fields of investigation, surveys of training centres, examinations, correspondence courses.	74 – 84
Financing	Aim, support measures, professional training levy, tax relief	85 – 89
Professional education administration	Federal Institute, state committees, responsible authorities, examining boards	90 – 121

The example of the Federal Republic may only apply to a limited extent to other countries because, among other factors, trainers in factories are lacking there. Training in the factory, however, is essential, precisely for developing countries (problem of numbers, question of costs, practical orientation). Such a pattern is by no means intended to create a uniform system of professional education, which anyway cannot be achieved.

Every country needs its specific system of professional education, conforming to its own conditions.

As wide a scope of jurisdiction as possible

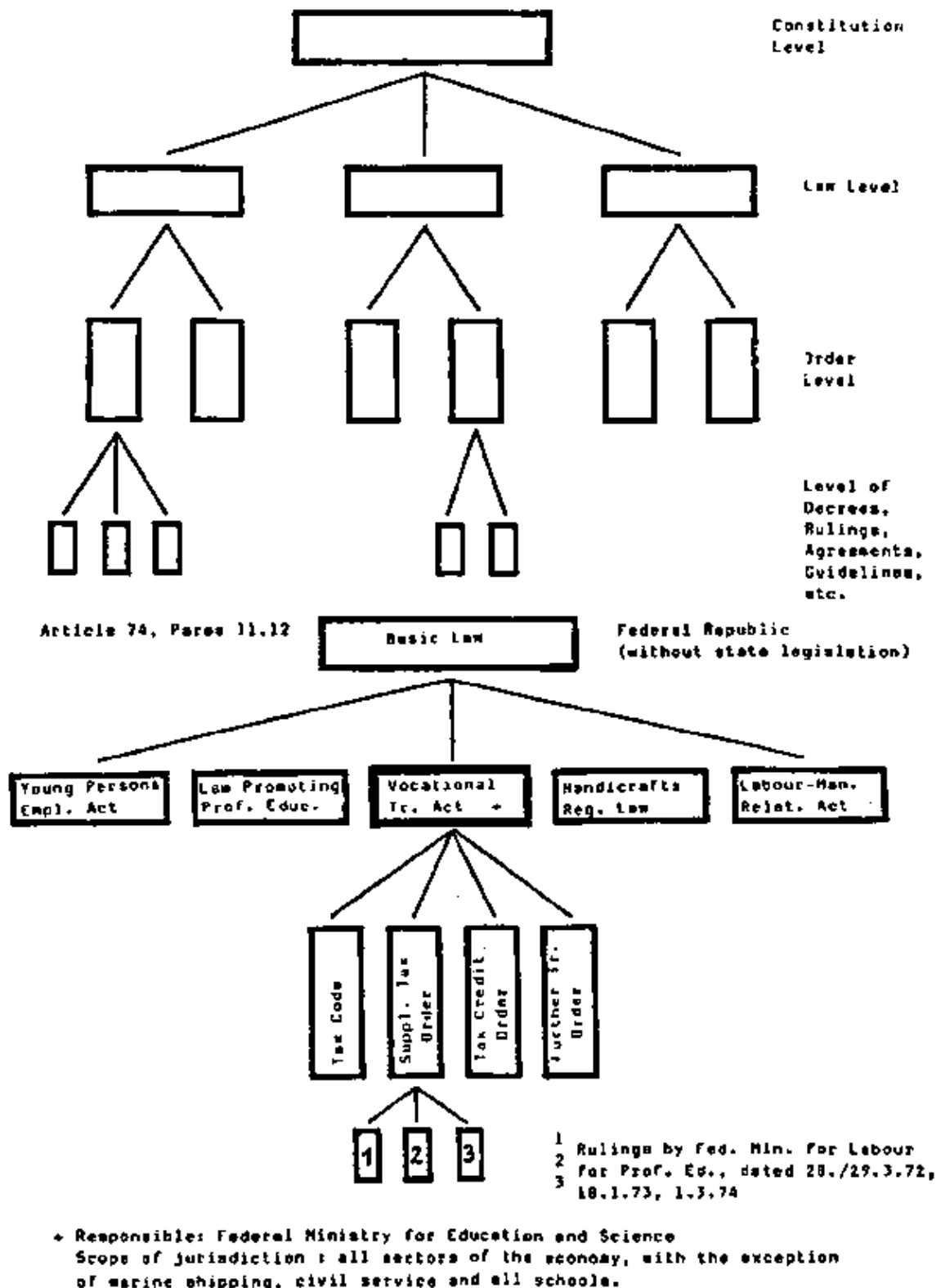
Apart from those matters needing to be controlled by law, the scope of jurisdiction for a legal foundation needs above all to be determined accurately. It should be kept as wide as possible, as is the case in the Federal Republic in the Vocational Training Act. The Act affects civil law in the Federal Republic. It applies to all public and private training firms/factories in all sectors of the economy, with the exception of marine shipping and the civil service. It does not apply to professional education conducted in schools, which is subject to the sector of public law in the federal states.

Clear responsibilities

Legal fixation enables not least responsibilities in a country to be clearly defined. This in turn facilitates channelling efforts towards further development of the system.

In the Federal Republic, the Minister of Education and Science is responsible at the federal level for out-of-school professional education. In the states of the Federal Republic, the Ministers of Economics are generally responsible. The Ministers of Education and Cultural Affairs are responsible for professional education in schools in the federal states.

Throughout the world, the responsibility for education mainly lies within the scope of Ministries of Labour. The system of legal foundations may be summarized and represented in a simplified form as in the following diagram, insofar as they concern the federal level (unitary state). In the case of member states (federal states), it is necessary to pay additional attention to individual legislation.



1.5 Typical systems and comparisons between systems

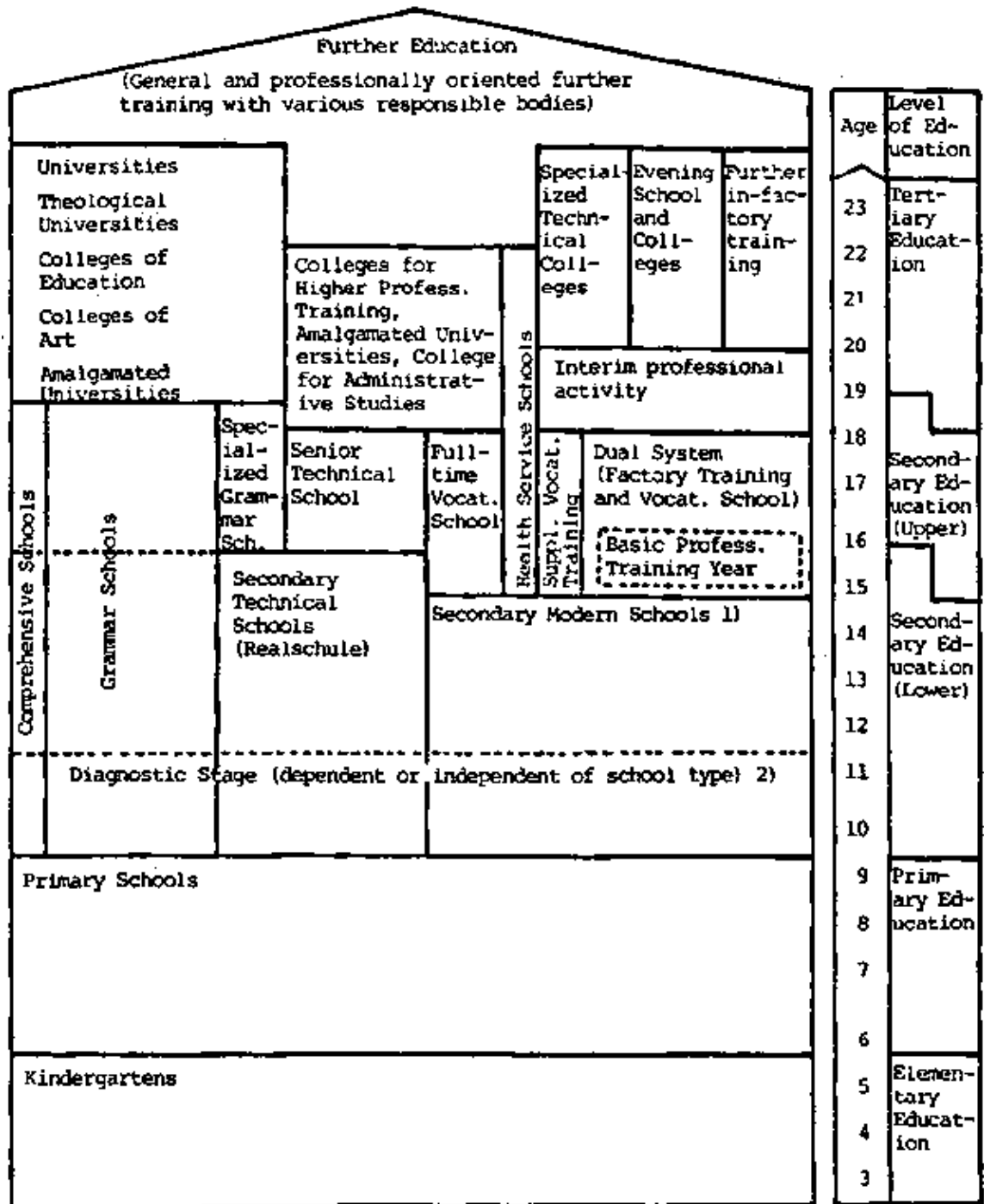
Permeability

Constant further development

What type of educational system do you have in your country, and what place is occupied by professional education in this system? Such or similar questions are nearly always found at the beginning of discussions with experts in professional education from different countries. In the context of professional education, it is particularly important to recognize what body is responsible for training and who conducts the examinations. The educational system of a country should be a unified whole, but not permeable in all directions. It must be possible for someone who is willing and capable of achievement to rise through all sectors. This promotes social harmony, and allows forces to develop in all social classes. Above all, possibilities must also be available for vertical advancement by manual workers, as they have been created in the Federal Republic with the so-called second education route (from apprentice to academic). No one educational system will ever be a final one. On the contrary, it must be in a process of constant further development.

Dual System

To attempt to compare the results of different systems of education is fruitless. The evidence provided by the real situation is much more important: Ye shall know them by their fruits! The nucleus of the system of professional education in the Federal Republic is referred to as the "Dual System", because training is generally conducted at two places of learning, in the factory and in the vocational school (cf. following diagram). This is also the case in other countries, although it mostly does not have such a long tradition.



Basic Structure of Education in the Federal Republic of Germany in 1983

1) Some 27% of secondary modern school pupils also attended a 10th grade class at a secondary modern school in 1983.

2) The diagnostic stage was attended by some 72% of the pupils in grades 5 and 6 in 1983.

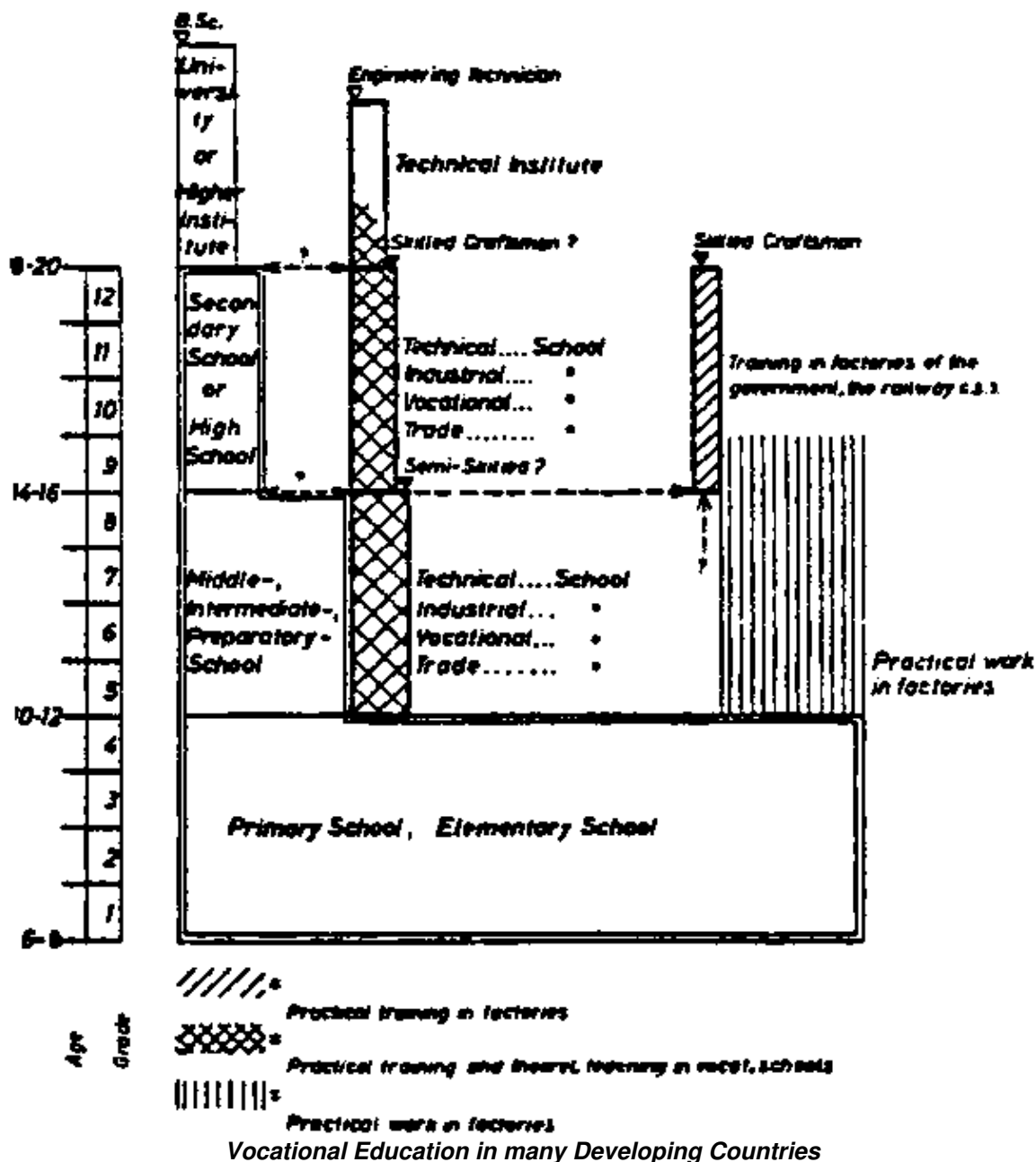
- Diagrammatic representation of the typical structure of the educational system in the Federal Republic of Germany. There are variations in the different states.

- Allocation of the age to each of the educational establishments applies for the typical, earliest possible entry and uninterrupted progress through the educational system.

- The size of the rectangles is not proportional to numbers of pupils attending.

Basic model for developing countries

A typical basic model has been established for developing countries, which may be found throughout the world. This outline (cf. following diagram) serves as a "general orientation to the structure of schooling and training in developing countries" (WISSING 1964, p. 67).



In developing countries, full-time professional/vocational schools frequently follow immediately on grades 4, 5 and 6; it would be interesting to assess the results of these schools. In addition, there are also vocational schools which simultaneously prepare students for university entrance and employment as a skilled worker. An evaluation of their results would also provide interesting data. Do students tend to adopt employment as skilled workers when leaving these schools?

Entrance examination for second stage of general education

Unlike industrial countries, there are no further possibilities of schooling in developing countries for those pupils who do not pass the entrance examination to the second stage of general education. These children are much too young (10 – 12 years of age) to enter a factory-related course of professional training.

1.6 Historical survey

China since middle of first millennium

Professional education can naturally be traced back differently in different countries. For China, the roots go back as far as the mid-6th century A.D. "Laws on the organization of in-factory professional training and particularly of apprenticeship may be found at a very early date in a country with such ancient and highly developed culture as China. A first classification of professions to be taught was made some 1,500 years ago" (WISSING 1968, p. 651).

Brazil since 1942

But it is also worth looking back, even in countries in which the systems of professional education are still recent. Thus, for example, it may be seen that only professional education in the sector of industry and trades was initially regulated with the Brazilian SENAI, created by law in 1942. Only after this had led to success was commercial professional education (SENAC) and professional education for agriculture (SENAR) established on the pattern of SENAI. This illustrates the careful and consequential approach in expanding professional education to as many sectors of the economy as possible in one country (cf. 1.4).

Scope of jurisdiction in India

India is also worthy of note in this respect. The Indian Apprentices Act of 1961 only includes those professions which are expressly defined as included in the Act by an implementing regulation (designated trades).

In-factory training in the Federal Republic has always been in existence

For an understanding of professional education in the Federal Republic, it is of essential importance to have a knowledge of its historical development in order to give an answer to what is perhaps the most important question: why do factories voluntarily take on full responsibility for training at their own expense? Since its creation at the time of the medieval guilds, professional education in the Federal Republic has remained the intrinsic affair of factories/firms. The tradition of training manual skills from the apprentice via the journeymen to the master craftsmen has never been interrupted and was later adopted by industry. The vocational school was not added until relatively late.

Training factories in developing countries

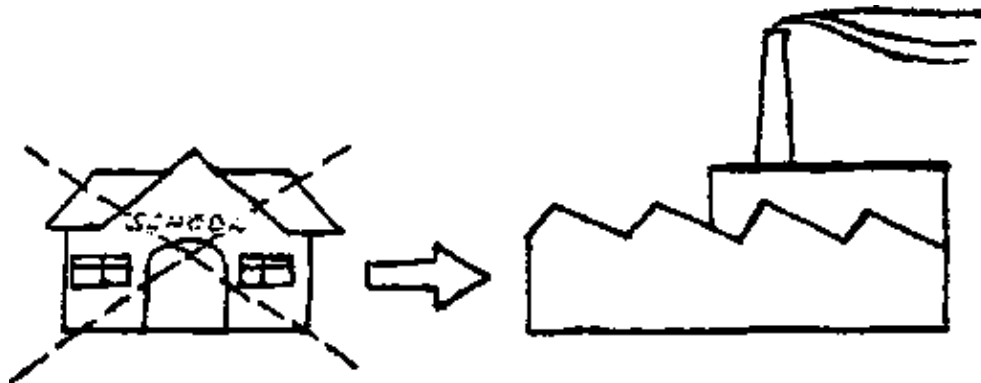
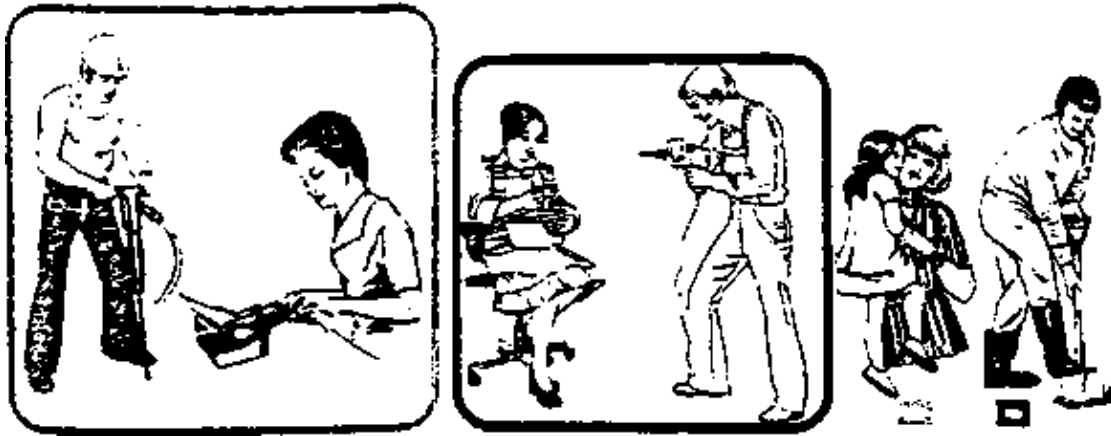
World-wide trends

Wherever this tradition is lacking, or was interrupted, as in France by the French Revolution, it is extremely difficult to motivate or remotivate factories to take on training. These short historical reviews lead us to two trends throughout the world, pointing to the future:

- Systems of professional education involve as many sectors of the economy in a country as possible
- Relocation of training from schools to factories

	(in thousands)	(in %)
Industry & Trade	771	46
Crafts	673	40
Civil Service	54	3
Agriculture	46	3
Others	131	8
Total	1675	100

Training Positions 1981



Tasks

Examples for application

1. Try to represent as graphically as possible the basic data for the educational statistics of your country (cf. Page 4: Developing Countries). Important are above all the number of boys and girls to be enrolled annually, the actual enrolment rate (in %), commencement and length of general compulsory education, the proportion of school drop-outs (in %), and the distribution of those leaving the primary school over the subsequent (4) possibilities.
2. Name the aims of professional education in your country, and indicate where these are formulated (source).
3. Name the definition of professional education in your country, indicating how professional education in your country is sub-divided, and name the location where this can be found (source).
4. Name as accurately as possible (e.g. number of the Act, date of decree) the legal foundations for professional education in your country. In addition, indicate the appropriate scope of jurisdiction for the most important legal foundation, stating who is the competent (responsible) body (e.g. Ministry of Education). The diagram on Page 24 will serve to furnish ideas.
5. What structure does the system of education have in your country (including professional education), and where are most important differences from the system in the Federal Republic of Germany? For purposes of illustration, produce a diagram following the diagrams on Pages 28 and 30.
6. How long has there been professional education in your country, and when was it most importantly given legal foundation for the first time? What main trends may be quoted for the further development of professional education in your country?

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2. How does one enrol in the different training courses?

Guiding questions

- How can it be prevented that only chance decides on the correct choice of profession by a young person?
- What conditions is it normally necessary for an apprentice to fulfil before commencing professional training?
- What possibilities are there for training, and how important are the leaving certificates?
- How can it be ensured that training is only conducted in recognized professions, and not in "wild disorder"?
- What possibilities exist for training underprivileged persons who do not fulfil the normally expected conditions?

2.1 Vocational counselling

Legal foundations

Professional education is often regarded as an interface between the world of the school and the working world. This also applies to vocational counselling. It is therefore also in a number of cases governed by the same legal foundations as those used for professional education. Thus, for example, in the Federal Law on Professional Education in Switzerland, dated 19.4.1978 (Articles 2–5). In the Federal Republic, the legal obligation to vocational counselling is given in the Employment Promotion Act (AFG), dated 25.6.1969. The basic idea and fundamental principle for the AFG is rooted in Article 12 of the Basic Law (Constitution) of the Federal Republic of Germany. It guarantees every citizen the free choice of a profession, place of work and training centre. Free choice of a profession is one of the constitutional rights. It is inalienable and inviolable.

The "Declaration of Human Rights" by the United Nations, dated 10.12.1948, protects constitutional rights.

Definition

The AFG defines vocational counselling (§ 25) as every provision of advice and information on questions of the choice of a profession or the change of a profession, which may only be conducted by the Bundesanstalt für Arbeit (Federal Labour Office) (§ 4). This is intended to guarantee the independence of such a service, above all from commercial interests. Occasional recommendations without payment are not subject to these regulations.

Principles for counselling

The principles for counselling are laid down in §§ 27 –32 of the AFG. They take account of physical, intellectual and character-related features, aptitude and the personal circumstances of the persons seeking advice with respect to the situation on the labour market.

Persons seeking advice

Mediation of places of training

The persons seeking advice are for the most part young people faced with the choice of initial professional training. This includes in particular the mediation of training places in factories or schools, for which vocational counselling is also mainly responsible. Whatever type of vocational counselling measures are conducted, these are always given objectively, impartially and free of charge.

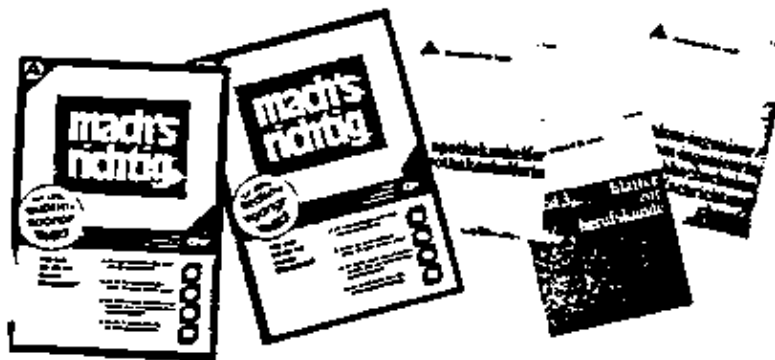
Financing

Vocational counselling is financed from contributions paid by employers and employees to the Federal Labour Office. These are currently 3% of the income subject to obligatory social insurance, which are borne 50% by employer and employee respectively.

Vocational information

Publicity work

Vocational information is one of the important services of vocational counselling. For this purpose, vocational advisors visit general schools and work there for a number of hours, mainly with the top classes. They organize film shows, visits to factories, exhibitions and talk at parents' meetings. They cooperate in programmes on vocational instruction on the radio and television. In addition, vocational counselling services distribute to all pupils in the last two classes before leaving school numerous brochures giving information on vocational instruction or serving as a background for teaching (cf. photograph).



Information brochures

Individual vocational counselling STEP

Vocational information is given individual supplementation by personal vocational counselling, of which approximately 70% of all school-leavers avail themselves. Preparation for individual personal interviews is provided by the self-study programme STEP (cf. photograph).

Grants towards professional training

One of the most important services of vocational counselling is not least the granting of financial aid, particularly grants towards professional training to young people in difficult financial circumstances, who only receive a small payment during training. In 1978, some 180,000 young people were given a total of 281 million DM in grants towards professional training; each young person thus received on average 1,160. – DM

(just under 100. – DM/month).

External organization

The Federal Labour Office is organized as a body incorporated under public law. Representatives of employees, employers and the state sit in an honorary capacity in its self-governing organs. In addition to the Headquarters in Nuremberg, there are the Regional Employment Offices and 146 Local Employment Offices with some 500 branch offices. Each of the 146 Local Employment Offices has its own department for vocational counselling, with a permanent Documentation Service (Vocational Information Centre) at its disposal. In widely dispersed rural areas, additional Mobile Vocational Information Centres are increasingly being employed weekly in schools.

Counselling staff Vocational advisors

The work of an individual vocational advisor depends on the group of persons to which he has to give advice, e.g. secondary modern school-leavers, secondary technical school-leavers, grammar school-leavers, students, handicapped persons. A total of just under 6,000 persons are available for vocational counselling in the Local Employment Offices of the Federal Labour Office. Approximately half are expert advisors. They receive their training at the Specialist College of the Federal Labour Office in Mannheim over 3 years, and on successful completion graduate with the academic degree of "Diploma in Administration". Vocational advisors for grammar school-leavers and students need to have completed a course of university studies.

Further forms of counselling

In addition to vocational counselling, there are further forms of counselling in the Federal Republic of Germany which should not be confused with vocational counselling; advice on training given by factories, educational advice and school career advisory services in the general schools, together with young peoples' advisory services for various problem groups of young people.

Alloted quotas

It is obvious that such a broadly established vocational counselling service as that in the Federal Republic is only sensible where a fully differentiated system of education provides many possibilities. Wherever possibilities for choosing a profession are limited, or where young people are even allocated to specific professions on the basis of alloted quotas, vocational counselling is less important, or even manipulated.

2.2 Intellectual and physical aptitude

Fundamental requirements

Adequate high level of general education for all

The preceding sub-section 2.1 clearly shows how very important it is to decide individually on what profession is best suited for a certain young person. Nevertheless, requirements can be listed which need to be fulfilled in principle before individual demands can be considered. "It has been shown throughout the world that crafts, industry, agriculture and trade only develop in the current day and age to the extent necessary to satisfy needs wherever the entire population has adequate general education at its disposal. It has particularly been proved that measures taken in the field of professional education only achieve a sufficiently broad effect where the great majority of young people entering professional training have had a basic general education, and have mastered the cultural techniques (reading, writing, arithmetic), as provided by at least 8 years' attendance at school" (WISSING 1963, p. 18).

At least 8 years' attendance at school

The minimum 8 years' attendance at school, which is frequently not guaranteed in developing countries, has already been referred to as a problem (cf. 1.1). We have also referred to the MES approach to a solution, developed for this purpose by the ILO, which should only be understood as an interim solution.

Development of moral forces

The minimum 8 years' attendance at school is nevertheless not only intended to ensure the intellectual prerequisites for professional training. The development of ethical and moral forces is important for active cooperation in community life.

8 years' attendance at school not as privilege

It is important that a minimum 8 years' schooling is the normal average in the country and not the privilege of a few over the broad masses. Otherwise, the danger exists that young people are only temporarily willing to carry out manual work after completing their professional training. Sooner or later, they will try to avoid little-appreciated manual labour by attending secondary schools.

More flexible demands for adults

Demands are to be applied more flexibly for adults, who generally participate in professional education measures voluntarily during their leisure time. It is to be assumed that they will be able to fill existing gaps in their schooling more quickly on account of their greater interest.

No learning by rote without understanding

A great obstacle to achieving intellectual ability is learning by rote subjects which have not been fully understood, a phenomenon frequently observed in developing countries. The reason for this is understandably the too short a period of attendance at school, which positively provokes the teaching of mere learning. In Germany, too, it was not until the beginning of the 20th century that the so-called "crammer" began to disappear. Even today, it would not seem to have disappeared completely. The continually increasing volume of material aggravates the problem, even in the case of more than 8 years' attendance at school.

Beginning of training not under 14 years of age

Age at the outset of training is a decisive factor for physical aptitude. "Nobody argues against the fact that is pointless to start with vocational training before the 14th year is completed" (WISSING 1965, p. 20). Young people under 14 years of age are not in a position to withstand the physical stresses of serious practical training, above all in industrial-technical professions. They are also too young to make a sensible choice of profession (cf. 2.1). Last but not least, it should be noted that the fitting out and use of well equipped teaching workshops is very expensive, and can only be justified if young people are old enough.

... not over 18

Wherever professional education begins to be taught before the age of 14, the appropriate schools should be converted into schools offering general education (cf. 1.5). In order to avoid complications, the age of admission should not exceed 18 years of age.

Medical examination

Probationary period

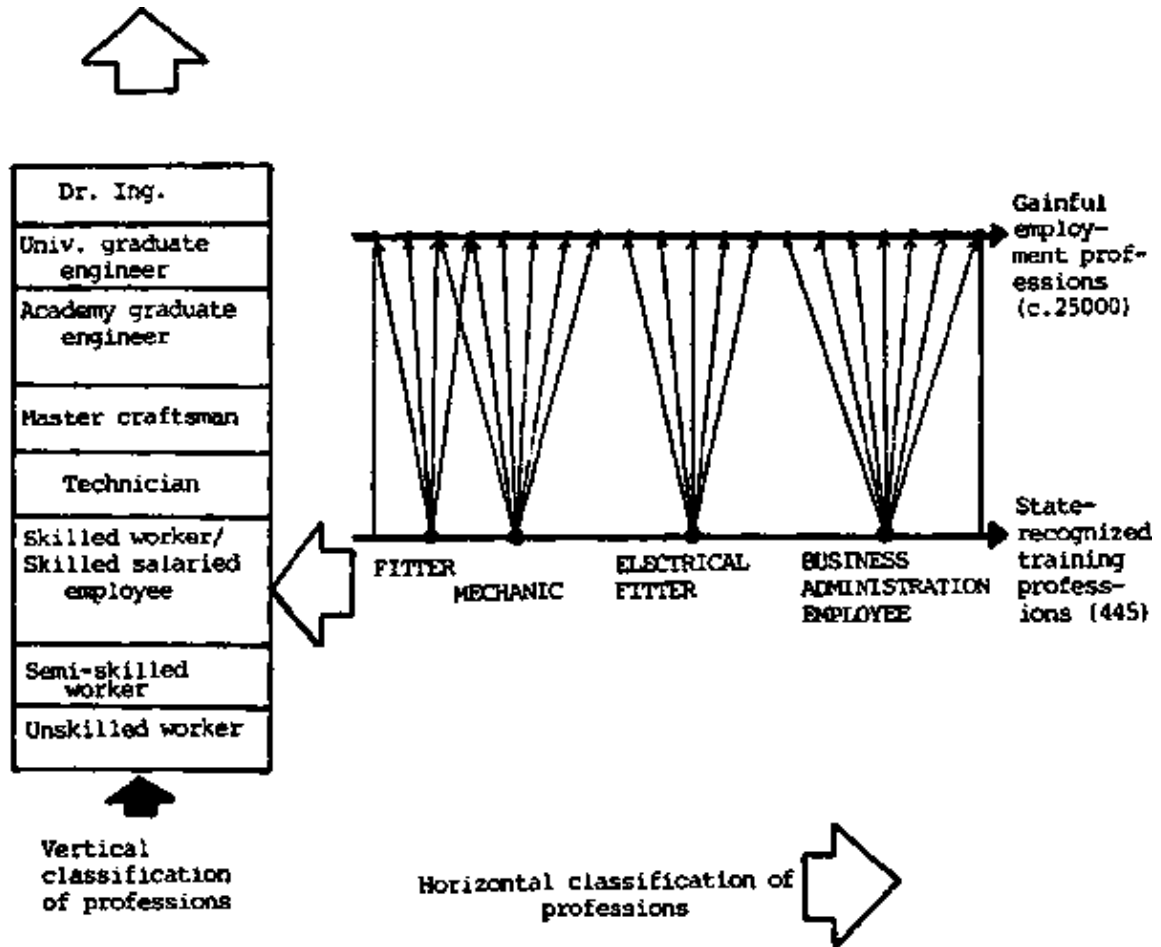
Fulfilment of the intellectual and physical conditions does not automatically lead to adopting professional training. Although the Vocational Training Act in the Federal Republic does not provide for entry requirements to commence professional training, entrance examinations are held by many factories, particularly when the number of applicants is larger than the number of places available. These examinations should be open to all classes of the population. Less importance should be attached to verifying that certain school-leaving certificates common in one federal state, in the interests of lower and middle social classes. The aptitude test should include a medical examination. The final decision on commencing professional training should not be taken until a probationary period of some 4 weeks' duration has expired.

2.3 Nature and number of training professions

ISCO: 25,000 professional activities

Some 25,000 professional activities are described in the "International Standard Classification of Occupations" (ISCO) of the ILO. Preparation for a large proportion of these is by means of training in a

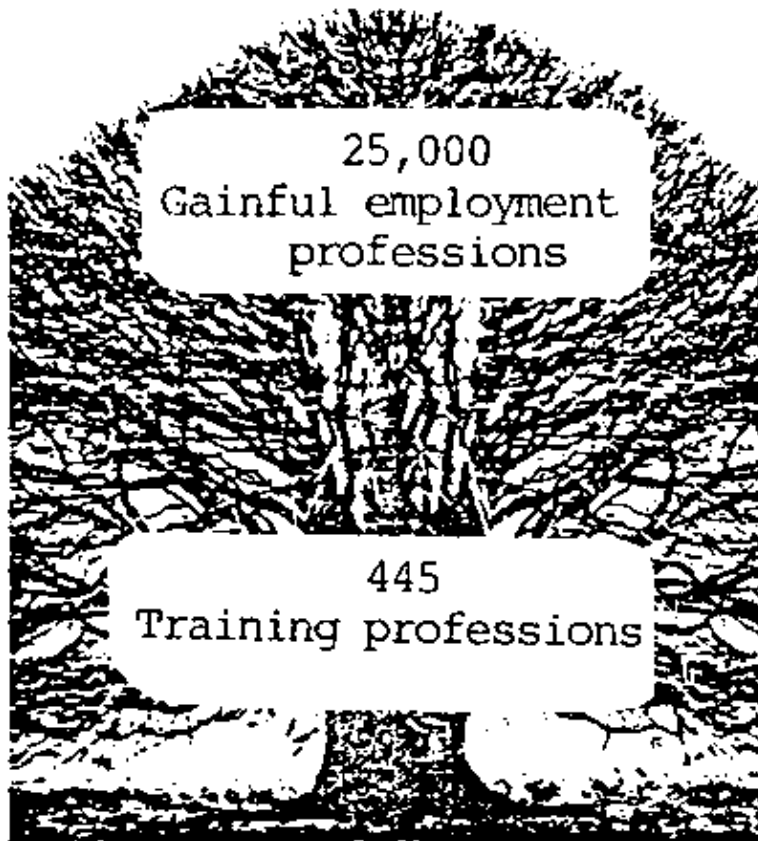
training profession. Training professions can thus be regarded as a qualification package at the level of a skilled worker, as the following diagram illustrates for the relationship between training professions and jobs in gainful employment.



430 training professions in the Federal Republic

Depending on whether one training profession is used in a country to prepare for a smaller or greater number of professional activities, there is a smaller or greater number of training professions. In the MES approach to training by the ILO, this would probably result in several thousand "training professions", because the sub-division leads as far as a partial qualification (Modular Unit), which is defined as being a "logically connected and self-contained task", "which can normally not be subdivided any further" (MASLANKOWSKI 1985, p. 325). The following Figure illustrates the bunching together of some 430 training professions in the Federal Republic of Germany. The catalogue of recognized training professions, which appears annually, continually gives a report on the latest situation.

Criteria for recognition



The oldest training professions in the Federal Republic are those crafts which arose as early as the Middle Ages. Criteria for the recognition of new (or the abolition of old) training professions have been in existence in the Federal Republic since 1974:

- Sufficient demand for appropriate qualifications, which is not restricted in time and is independent of individual factories;
- Training for qualified, self-responsible activities in as broad a field as possible;
- Emphasis on permanent professional activity, irrespective of age;
- Broadly based, basic professional education;
- Possibility of a systematic course of training;
- Adequate distinction from other training professions;
- Possibility of implementing training objectives;
- Length of training between two and three years;
- Basis for further training and professional advancement;
- Acquisition of the ability to think and act independently when employing skills and knowledge.

Training profession offer advantages

In the Federal Republic of Germany, completion of training in a recognized training profession provides certain advantages:

- Higher protection against unemployment;
- Right to qualified professional activity;
- Government support in the event of retraining and further training measures;
- Disability pension;

- Classification in a specific wage group;
- Recognition of the qualification achieved throughout the Federal Republic.

10 most popular training professions

	Male Apprentices %	Total
1. Motor vehicle mechanic	8.4	
2. Electrical fitter	5.6	
3. Machine fitter	4.4	
4. Joiner	4.1	
5. Mason	3.7	
6. Painter & varnisher	3.4	
7. Gas fitter & plumber	3.2	
8. Wholesale & export merchant	2.7	
9. Baker	2.3	
10. Toolmaker	2.1	40.0

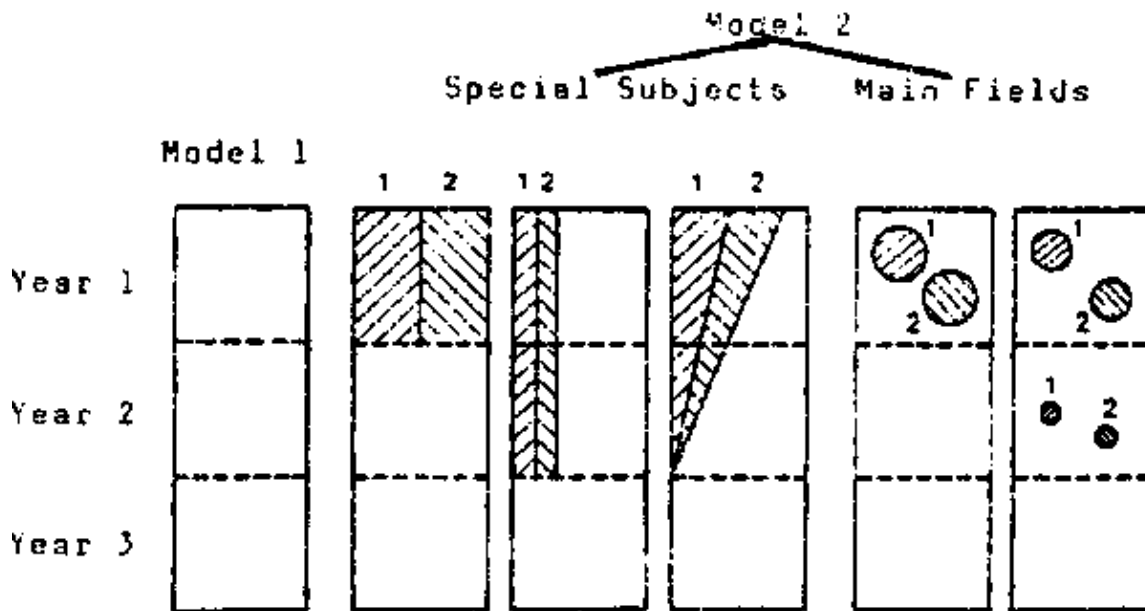
	Female Apprentices %	Total
1. Sales assistant	10.2	████████████████████
2. Hairdresser	9.6	████████████████████
3. Sales assistant in foodstuffs trades	6.4	████████████████
4. Office assistant	6.2	████████████████
5. Doctor's assistant	5.5	██████████████
6. Business administration assistant	5.5	██████████████
7. Retailer	4.2	██████████
8. Dental assistant	4.2	██████████
9. Bank assistant	4.1	██████████
10. Wholesale & export merchant	3.2	██████████ 59.4

The ten most popular training professions (1981)

For the total of some 430 training professions in the Federal Republic of Germany, it may be seen that in 1980 approx. half of all apprentices chose only 10 of the 430 professions.

The restriction to only approx. 430 training professions is made easier by allowing specialization in the form of special subjects or main fields within a training profession.

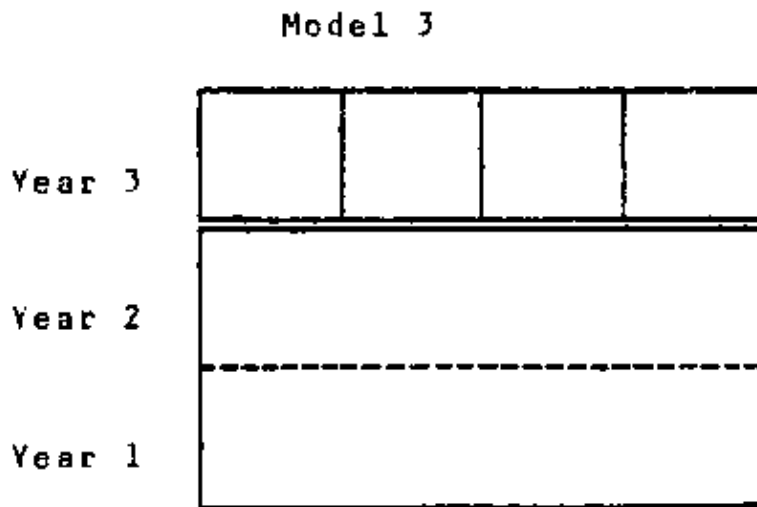
Special subjects and main fields



Model 1 applies to training professions without any form of specialization. Training contents and examination requirements are uniform for all apprentices in this profession. Model 2 applies to training professions with specialization in the form of special subjects or main fields, which nevertheless do not justify sub-division into different training professions on account of their minor scope. The different training contents expressed in specialization are also taken into account in examination requirements.

Training organized in stages

A third principle of classifying training professions is training for several professions within the framework of training organized in stages.



Training is here generally divided into two stages.

Year 1 of Stage 1

In the first year of Stage 1, skills and knowledge are imparted forming the basis for professional training in all training professions included in the training regulations.

Year 2 of Stage 1

The subsequent second year of Stage 1 contains specialized professional training. The first final examination takes place at this Stage; in niveau, it already contains qualifications to be gained by professional training, on account of the systematic layout and organization of the contents of this training course. This final examination qualifies young people in two directions: on the one hand, a young person can already pursue professional employment with this qualification, which is fully exploitable on the labour market; on the other

hand, however, he can also continue professional training immediately or at a later date.

Stage 2

The second Stage of specialized professional training prepares the young person for specific, qualified professional employment. The individual classified professions may for their part contain further specialization, according to special subjects or main fields.

Training professions in developing countries

In developing countries, we are mainly concerned with those training professions for which there is a great demand, and which as far as possible correspond in terms of contents. "It is, therefore, recommended to limit the training programme to vocations which:

- a) are much in demand in the factories and for which sufficient jobs are available,
- b) at the beginning of the training the apprentices can be trained for a longer period jointly as they have to learn the same skills." (WISSING 1965, p. 21).

Metalworking professions at the outset

At the outset, skilled workers should be trained in metalworking (including motor vehicle) and electrical engineering professions, to be employed in assembly, maintenance and repair. The demand for all types of experts grows with the economic development of a country. This is particularly true when domestic production commences (not only the import of foreign products).

Polyvalent training professions

Information on training professions which can also be particularly suitable in developing countries may be found in a survey conducted by the Institute for Labour Market and Professional Research (IAB) at the Federal Labour Office, dating from 1972. According to this survey, the construction, metalworking, electrical and commercial professions contain such training professions which can be a substitute for a particularly large number of other training professions, i.e. they are to a large extent polyvalent. A skilled worker trained in such a profession is (on the judgement of superiors) to a large extent in terms of his function in a position to fill a job for which a different form of training is primarily required from that which he has undergone. The professions concerned are reproduced in the following diagram.



Polyvalent training professions

Outstanding machine fitter

In the case of the primarily indicated training profession of a toolmaker, 23.4% of the alternatives mentioned refer to the training profession of a mechanic. Thus, if a trained toolmaker is not available, the job can also be filled by a mechanic. Even more suitable, however, would be a machine fitter (46.9%). The result of the survey shows the outstanding importance of the training profession of a machine fitter. This profession can act as an alternative in place of 17 other training professions, whose substitutional relationship is at least 10%. This profession reduces the danger to the national economy of training without attention to needs, and increases the chances for the individual to find an adequate job. The results of the survey, which in the meantime have been reinforced by further surveys, are also of considerable value for vocational counselling (cf. 2.1).

2.4 Principle of exclusivity

Young people only in recognized training professions

Deviation from regulations impossible

The principle of exclusivity prescribes that young people may only be trained in a recognized training profession. Exceptions require a special ruling (e.g. Order). This principle behind the Vocational Training Act of the Federal Republic of Germany (§ 28) is intended to guarantee that apprentices, insofar as they are young people, can pursue professional training planned, ordered and conducted according to the Vocational Training Act. Any deviation from the regulations for training leading to a specific profession is thus rendered impossible.

Particular groups of persons

The possibility of being able to deviate from this principle in exceptional circumstances applies above all to particular groups of persons. The groups of persons are to be defined in the special regulations. These consists of persons who require particular provisions on account of different schooling, because of prior professional activity or as a result of a physical, intellectual or psychological handicap, in order to be able to

take appropriate account of educational disadvantages. Further exceptions are possible if it is intended to try out a new training profession.

Make MES training possible

This legal structure to safeguard proper training can by all means be applied in developing countries. The large group of persons having a different educational background present there could also be trained outside of recognized training professions, e.g. on the basis of MES, within the framework of the legal system. This form of organizing professional training should as far as possible correspond to the regulations for recognized training professions, and be designed so that professional training can as far as possible be continued to reach a recognized training profession.

Tasks

Examples for application

1. What types of counselling are there for young people in your country, and which of them are concerned with counselling for professional training? What legal foundation (Act, Order, etc.) is used to govern professional counselling?
2. What intellectual and physical conditions must be fulfilled in your country by young people and adults before starting professional education measures?
3. What is understood in your country by a training profession, and how many are there? What advantages does the completion of training in a profession have in your country?
4. How is it achieved in your country that young people as a rule may only be trained according to existing regulations, or is this not ensured?
5. What possibilities for training exist for physically, intellectually or mentally handicapped persons in your country?

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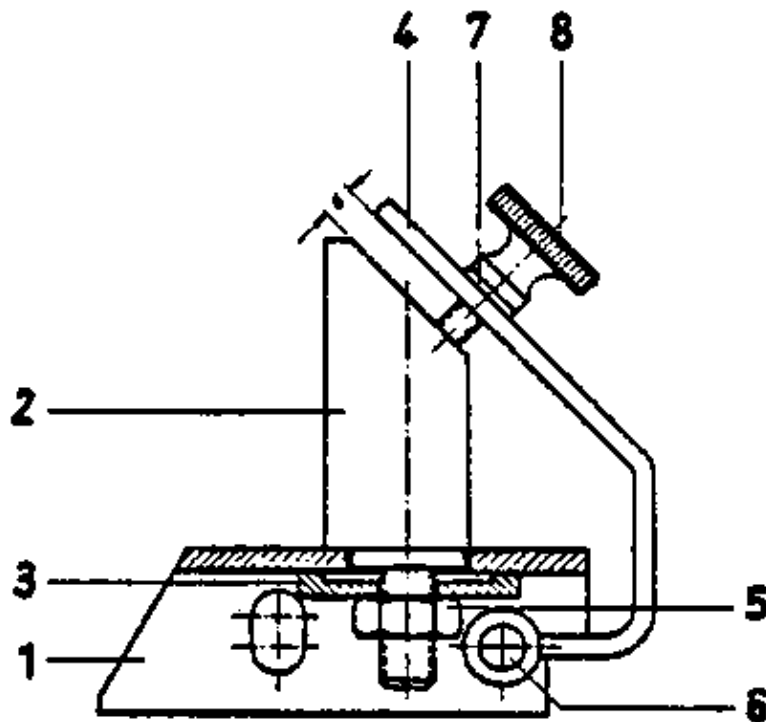
3. How can the contents of training be determined and designated?

Guiding questions

- What are the contents of training and who can establish them and in what way?
- How binding are the contents of training to be, and how are they to be determined?
- How can the contents of practical and theoretical training be coordinated?

3.1 Skills and knowledge required in the training professions

Determining the contents in professional training is to be viewed in the light of social and economic marginal conditions (cf. 2.1: 4 fields of learning). Irrespective of the general field to which training is to apply, the contents can be classified within the "didactic triangle".



The ABB course, which is today edited by the BIBB as "Manual Skills in Metalworking", continues to count as the standard course for teaching the skills and knowledge required in the first year of training for all metalworking professions; irrespective of whether training is organized theoretically in vocational schools or in factories (cf. 4), and irrespective of the country in which it takes place: "It has been shown that the success of training with this course in developing countries is fully equal to that achieved in Germany" (WISSING 1964 a, p. 16). Its international importance may also be seen in the languages into which the course has been translated: English, French, Spanish, Arabic, Persian, Afghan, Chinese and Thai.

3.3 Methods of determining the contents of training

There is no one standard method for determining skills and knowledge. The experience gained in the Federal Republic of Germany over many decades has led to the method used by the BIBB. It is based on determining the contents necessary for a profession (BENNER 1982).

First insights into the situation of the profession are obtained by studying professional literature and sources.

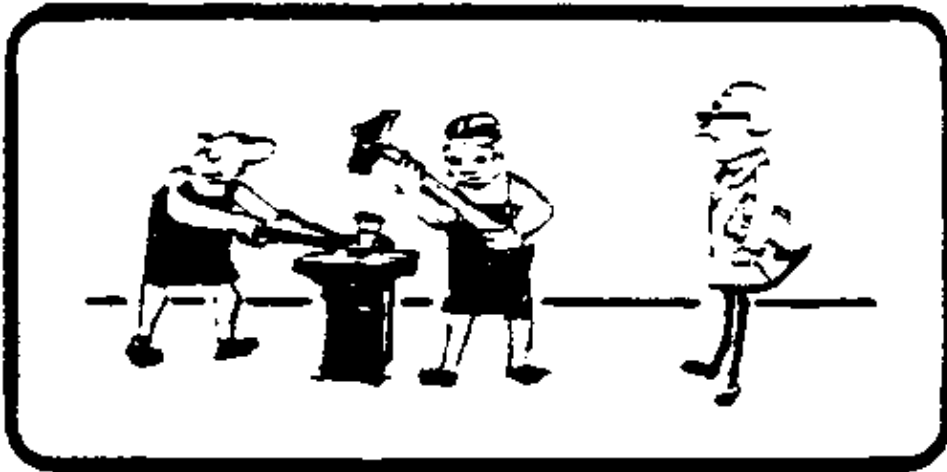
Study of professional literature and sources



This should above all include specialized literature, standard works associated with the profession, school textbooks and specialized magazines, statistics on the development of employment figures, the intensity of training, structures of factories, investments and share in the domestic product for the appropriate factories.

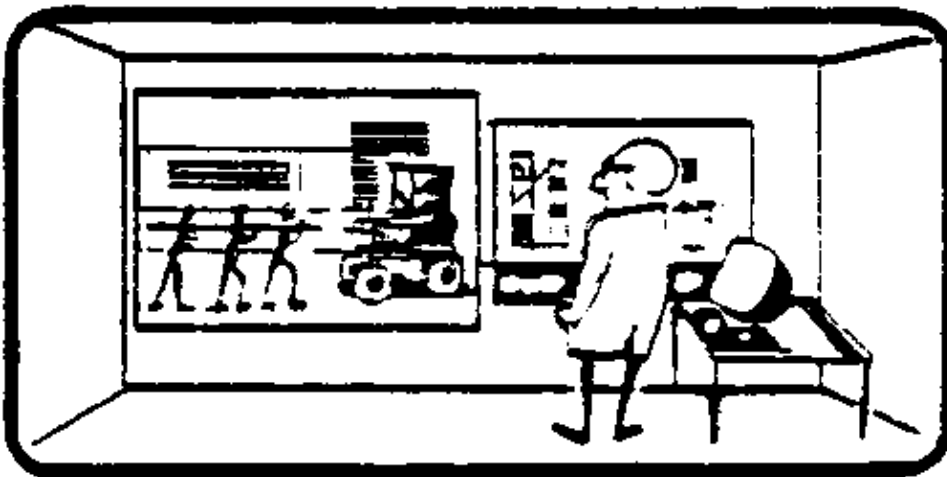
Direct information as to the actual situation in professions can be obtained by visits to factories and case studies.

Visits to factories and case studies



The main emphasis of such measures are visual inspections and discussions with experts, providing clarity on: the organization of the factory and work, the machines and equipment used, working techniques, nature of the workplace and its equipment, establishment of the task to be fulfilled, of conducting operations, of control, of transferring the results of operations, of the intellectual, psychological and physical conditions for the human being and his behaviour, and the professional qualifications required. The results should be recorded in written reports.

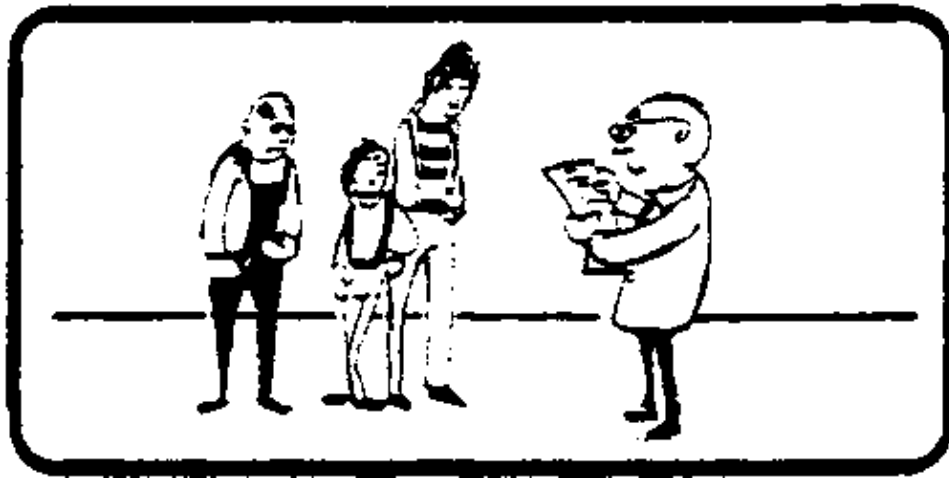
Representative analyses of activities



In addition, representative analyses of activities are conducted in order to raise the intensive but nevertheless subjective results of case studies to a level of general validity; these analyses differ from case studies particularly in terms of quantity. They are used to determine those sectors of the economy, branches and size-groups of factory in which the professional activities exist. In addition, they provide information on regional distribution, the type of production and the degree of mechanization in factories.

Interviews with experts serve to clarify specific topics.

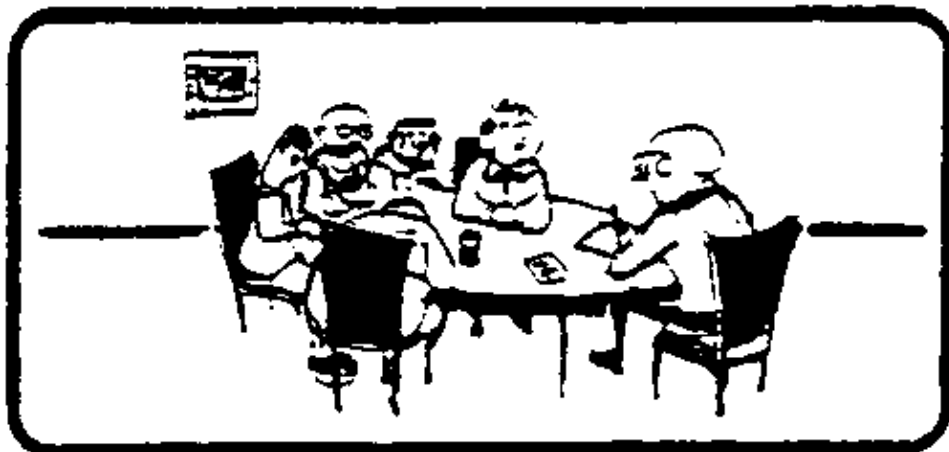
Interviews with experts



The special expertise of experts can above all lead to sound conclusions when, for example, it is necessary to establish the latest state of technical development and the effects of this on the professions concerned, or when it is a question of representing rare operating techniques.

The four methods outlined above are used to define the material basis for developing the contents of training. The use of commissions of experts has proved useful in selecting and deciding on which professional contents are to be included in the courses of training to be developed.

Commissions of experts



Processes of group dynamics arise among the experts involved in such commissions. Specialist competence in the professional subject is just as important as in the field of education and teaching theory related to the subject.

3.4 Training regulations and basic outline courses of study

Principle of flexibility

Uniform minimum qualification

Even contents of training which have been determined using the most perfect of methods cannot retain their value for eternity. In view of rapid developments, it must be possible to modify them without difficulty and adapt them to new circumstances. It is therefore a matter of principle that the contents of training should never be rigid or prescribe training strictly from the beginning to the end. Their flexibility must nevertheless assure that the result of training throughout the country does not fall short of a uniform minimum level. For example, it must be immaterial whether a motor vehicle mechanic has been trained up-country or in the capital. It must also be immaterial whether training has been conducted more theoretically in vocational schools or in factories. If training has been conducted in factories, the size of the factory should also have no influence on the result of training.

Curriculum

The contents of training are recorded in plans which are referred to in numerous different ways. The concept of a curriculum is a well-known one throughout the world, but this is interpreted in so many different ways that it is better to dispense with its use. In the Federal Republic, the contents of training for a course taking place in a factory are laid down in uniform form throughout the country in training regulations. The contents of supplementary theoretical teaching at vocational schools are to be found in the basic outline courses of study of the federal states (cf. Figure).

Training regulations and basic outline course of study

	in factory	in vocational school
Regulating document	Training regulations with following minimum components:	Basic outline course of study:
	<ul style="list-style-type: none"> - Designation of training profession - Length of training - Description of training profession - Basic outline training course - Examination requirements 	<ul style="list-style-type: none"> - Preliminary remarks - Fields of study - Learning objectives - Subject matter - Recommended time
Publication	Legal Order by Minister responsible in agreement with Min. of Ed, and Sc.	Edict by Min. of Ed. and Cultural Affairs
Legal standing	Standing of Act with direct binding character	Internal administrative regulations
Legal foundation	Vocational Education Act of 1969	School Acts in federal states

The training regulations list the minimum skills and knowledge to be taught during the entire period of training in a basic outline training course, which is generally attached as an appendix to training regulations in the form of tables, due to its wide scope. A short extract from a basic outline training course for training woodworking machine operators is given in the following illustration.

Training regulations with basic outline training course

Example: Basic Outline Training Course for Wood Working Machine Operator					
Serial No.	Section of Description of Training Profession	Skills and Knowledge to be Taught	Recommended Number of Weeks in Year of Training		
			1	2	3
1	2	3	4		
5	Measurement and classification of raw material wood according to use and utilization (§3, Para 1, No. 5)	a) How to describe methods and instruments of measurement, b) How to measure range of raw materials with tape measure, caliper rule and surveyor's staff. c) How to apply Tables for wood calculations. How to draw up timber lists.	2		
		d) How to classify wood according to type quality, dimensions and purpose of use under supervision.		8	

6	Cutting to size and blocking of raw material wood (§3, Para 1, No. 6)	a) How to describe chainsaws, circular saws and handsaws to cutting to size. b) How to describe bark peeling machines. c) How to describe cutting round timber or battens.	3		
		d) How to block raw wood ready for working.		1	

Character of a guideline

Flexibility

The basic outline training course form the basis for the individual training plan to be produced in the factory. It is a guideline for classifying professional training in the factory as to subject matter and time schedule. It is so flexible that is is possible to deviate from the prescribed time–sequence of training if special features within factory practice so demand.

The basic outline courses of study for that section of vocational school teaching related to the profession are also shown in tabular form. A short extract from the basic outline course of studies for woodworking machine operators is shown in the following illustration.

Basic outline course of studies

Example: Extract from Basic Outline Course of Study for Training Profession of Wood Working Machine Operator			
First Year of Training			
Fields of Study	Learning Objectives	Subject Matter	Time Recommended
1.2 Manual wood working	How to describe tools and operations used in manual wood working. How to distinguish tool edge and tooth shapes and to describe effect of various wedge shapes. How to describe maintenance of manual tools and name aids required.	Meas. instruments, marking out tools; saws, chisels, planes, scraper, rasp, file, bits and drills. Two–sided and one–sided wedge, forces on wedge, splitting and cutting effect; angle at tool edge and effect on cutting behaviour. Setting, setting tools; sharpening, sharpening tools and/or machines, accident prevention	20

3.5 Coordination of the practical and theoretical contents of training

Simultaneousness not achievable

Questions of coordination occur wherever it is not intended or not possible to teach all subjects at the same time, by the same trainer at the same place of learning. Absolute Simultaneousness of practical training and theoretical instruction would admittedly be ideal, but it is not achievable even within one single training centre.

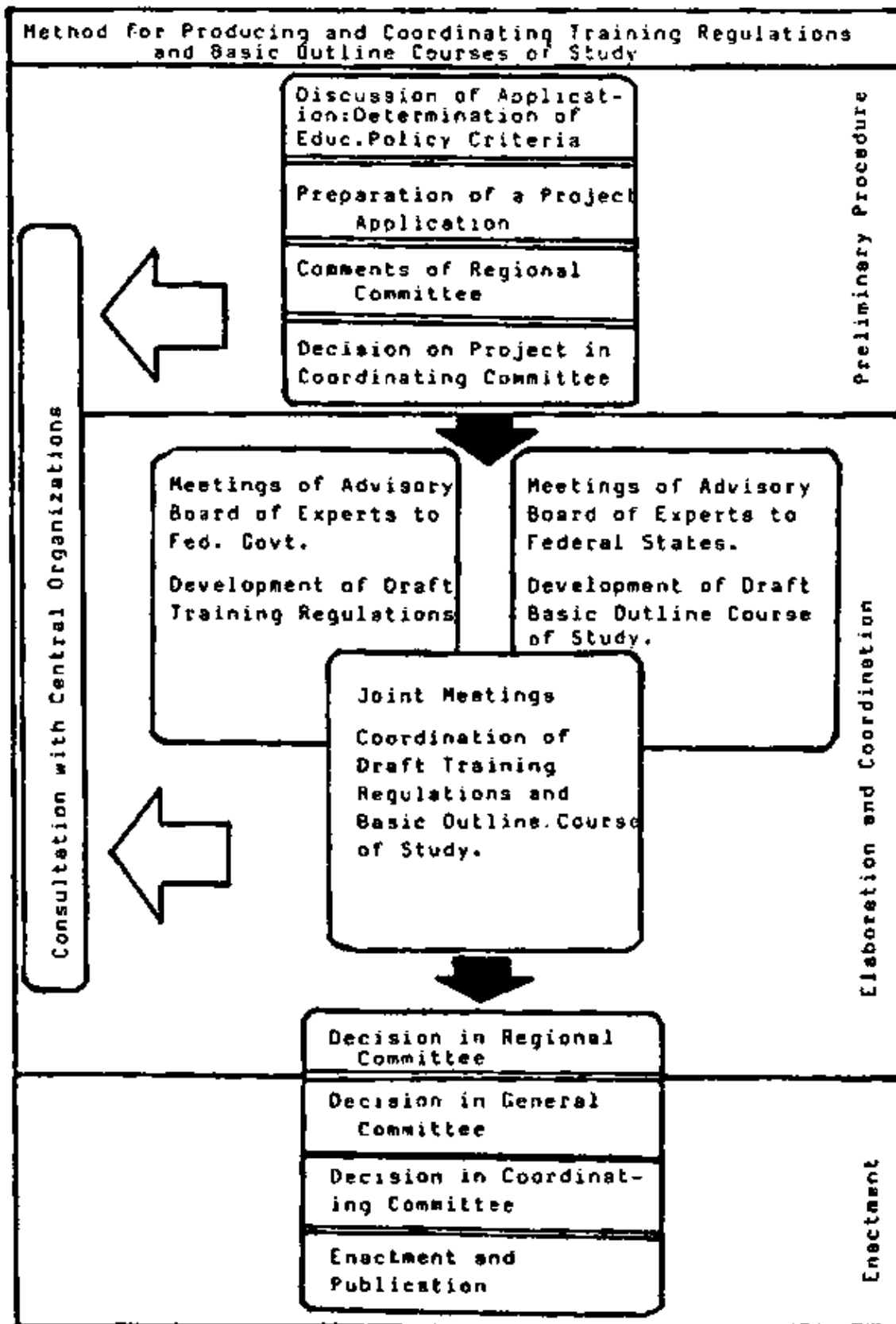
Precedence, simultaneousness, follow-up of theory

The prerequisite, namely, would be for all apprentices in the training centre to carry out the same activity at the same time during practical workshop training. But this is never the case. Physical and intellectual ability, together with industriousness and strength of will, influence the speed at which workshop exercises are completed by individual apprentices. In addition, all apprentices can never be trained at the same time on the same type of machine, because the number of the same machines is always smaller than that of apprentices. As simultaneousness is therefore not achievable, it may be seen as logical to let theoretical teaching following practical training. Theoretical observations are more fruitful when preceded by appropriate practical experience.

What is true for one individual training centre, is of fundamental importance for training plans which are valid throughout the country for all training centres and apprentices. In the Federal Republic of Germany, a process has been developed in the course of recent years to coordinate the contents of training, which begins at an early stage in producing training regulations and basic outline courses of study, and which includes all those predominantly involved, i.e. Federal Government, federal states, employers' and employees' organizations (cf. Diagram).

Preliminary procedure: criteria

Starting point for the application to issue training regulations and the accompanying basic outline course of study are the skills and knowledge established by the BIBB (cf. 3.3). They act as proposals when deciding on a regulating measure.



Main procedure

Procedure of enactment

Principle of overall agreement

In the preliminary procedure, the criteria for training regulations are determined; e.g. title of profession, length of training, number of previous training professions included, concept for training regulations, phases of

training outside the factory. During the process of elaboration and coordination, drafts of training regulations and basic outline course of study ready for enactment are developed and collated. The phase of enactment comprises approved and publishing. As the entire procedure is only completed on the basis of the principle of overall agreement, it is time-consuming. Several years frequently pass between discussion of the application and enactment.

Tasks

Examples for application

1. What importance do you attach to the contents of training which are not prescribed as skills and knowledge in training regulations and basic outline courses of study?
2. What institution in your country is concerned with determining the contents of training, and how is this institution organized outwardly and inwardly?
3. Describe the method used to determine contents of training in your country.
4. Where are the contents of training in your country laid down, and what degree of binding character do they have?
5. How are the contents for practical and theoretical training coordinated with each other in your country, or is this not the case?

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4. At what places of learning should training be conducted?

Guiding questions

- What is a place of learning?
- What places of learning predominate?
- How can places of learning be combined?
- How can a factory become the main place of learning?
- Is every factory suitable as a place of learning?

4.1 The concept of a place of learning

Learning = change in behaviour

Place of learning: life

Learning is to be understood in a very general sense as relatively permanent changes in behaviour, i.e. possibilities for the human being to change ideas, habits, attitudes, knowledge, skills and abilities with the aim of becoming independent. In this context, a place of learning is a place at which experience can be gained. Life –in all its forms and revelations – is thus the paramount place of learning.

Functional learning = unintentional

One is constantly learning everywhere in life, whether one wishes or not. This unintentional type of learning is referred to as functional learning. In simple cultures and societies, functional learning was sufficient.

Intentional learning = with design

In higher and highly developed societies, however, functional learning is no longer sufficient. Particularly in childhood and youth, people are intentionally encouraged to learn, and even obliged to learn for longer

periods of time (compulsory education). This learning is referred to as intentional learning. In order to implement this form of learning, special institutions, such as schools or learning workshops, are used; these are erected with the aim of making learning possible with specific objectives and resources.

Cognitive, affective, psychomotor

Learning takes place in specific sectors: cognitive, affective or psychomotor. A certain place of learning satisfies not only one of these educational functions, but generally all of them, albeit with different emphasis.

The number of places of learning which can be used is large. Even if a place of learning is understood as a spatially concrete structure in which intentional and guided learning takes place.

At this stage, it should be indicated that there is also radical educational scepticism towards institutionalized education in schools, which can be traced back to Classical times (Seneca, Plato).

Is school necessary?



Opinions differ on such questions as: Is something like school at all necessary? Would the human race not be in a better state without schools? According to the opinion of critics, schools contribute nothing to finding solutions for existing world problems (over-population, hunger, social inequalities, violence, war). "School teaches above all how important school is" (v. HENITG 1971, p. 76).

Illisch: De-schooling of society

This had led to alternatives, particularly in developing countries. As a method of de-schooling society, Ivan Illisch proposes a form of organization which is limited to "allowing the pupil access to every means of education which might help him to determine and achieve his own goals". Most people acquired the greatest volume of knowledge outside of school, and one can therefore dispense with it completely.

Freire: Political literacy programmes

The direct link of learning with the context of the world in which we live is the basis for the plan developed by Paulo Freire within the framework of literacy programmes in South America. Learning of cultural techniques is intended to be associated with "political literacy", above all for adults.

MES: self-study

These questions are not of equal importance for professional education. Nevertheless, a number of these ideas is contained in the MES concept by the ILO. MES training is in essence not linked to a particular place of learning. On the contrary, it presupposes self-study, even if this is supervised. It is only questionable whether self-study can be learned. Successful self-educated persons are the exception.

4.2 Types of places of learning

The wide variety of places of learning can be given a certain transparency if we distinguish between primary and secondary places of learning.

Primary places of learning

Primary means those places of learning which are exclusively equipped for learning, that is to say, for example, schools and teaching workshops. Primary places of learning tend to run the risk of being far removed from everyday life. Nevertheless, their strength lies in their freedom from extra-educational objectives.

Secondary places of learning

Secondary means places of learning in which intentional, objective-oriented learning admittedly takes place, but which predominantly fulfil other functions. Such places of learning are, for example, the workplace in a factory and hostels for young persons (boarding schools). The main objective at a workplace is the manufacture of a sellable product or a service. In hostels for young people, the primary objective is to allow young people to live and sleep close to the training centre/school. Secondary places of learning represent a limited everyday reality. Nevertheless, they do not thus automatically become places of learning in the sense of intentional learning, but only when they are utilized intentionally and systematically for processes of learning.

Practical training, theoretical teaching

For professional education, those places of learning at which practical training and theoretical teaching take place are to be seen as important. These can both be within one institution (one building), the vocational schools in the Federal Republic or training centres in developing countries. But they can also be conducted in separate institutions (buildings). Thus, for example, in the Federal Republic in vocational schools and factories (Dual System).

Theoretical teaching: systematic

Theoretical teaching generally constitutes no problem for the choice of a place of learning. Both within one institution and at separate places of learning (e.g. Dual System), it takes place in rooms specially equipped for this purpose. In the Federal Republic, this is the vocational school.

It is characteristic for theoretical teaching always to proceed systematically and on the basis of educational principles.

Practical training: close to practice, systematic

Practical training, in comparison, is considerably more complicated to impart. The guiding principle here is the need to organize training as closely related to practice on the one hand and as systematically as possible on the other hand. This leads us to of the factory and teaching workshop as places of learning. These may be private or public factories, in which goods are produced or services rendered. Teaching workshops predominate in full-time schools or training centres, in factories or as community teaching workshops.

4.3 Combinations of places of learning

Practical training within the framework of factory production admittedly fully satisfies the demand for closeness to practice, but is always difficult to implement systematically. The reverse is true of a teaching workshop. Nevertheless, fully efficient training is impossible without productive achievement.

If practical training is conducted exclusively in factories with only accompanying, part-time teaching, then above all possibilities b – f below are of interest.



a. No theoretical teaching



b. Theor. teaching continually accompanying



c. Theor. teaching continually accompanying, more extensive at beginning.



= Practical training in factories



= Theoretical teaching



d. Theor. teaching at intervals, beginning with practical training



e. Theor. teaching at intervals, beginning with theor. teaching



f. Theor. teaching at beginning, continually accompanying, later at intervals.



= Practical training in factories



= Theoretical teaching

Practical training entirely in factories presupposes that the factories are willing and capable of taking on training; wherever these conditions are not fulfilled, or where practical training is to be organized in a more systematic fashion, it should be conducted entirely or partially in schools. The possibilities a – f below are here of particular interest.



a. Entirely in schools



b. First in schools, then in factories.



c. Alternately in schools and factories



d. First in schools, then in factories, with contin. accomp. theor. teaching.



e. First in schools, then in factories, with theor. teaching at intervals.



f. First in schools, then in factories, with contin. accomp. theor. teaching, then in schools



= Practical training in factories



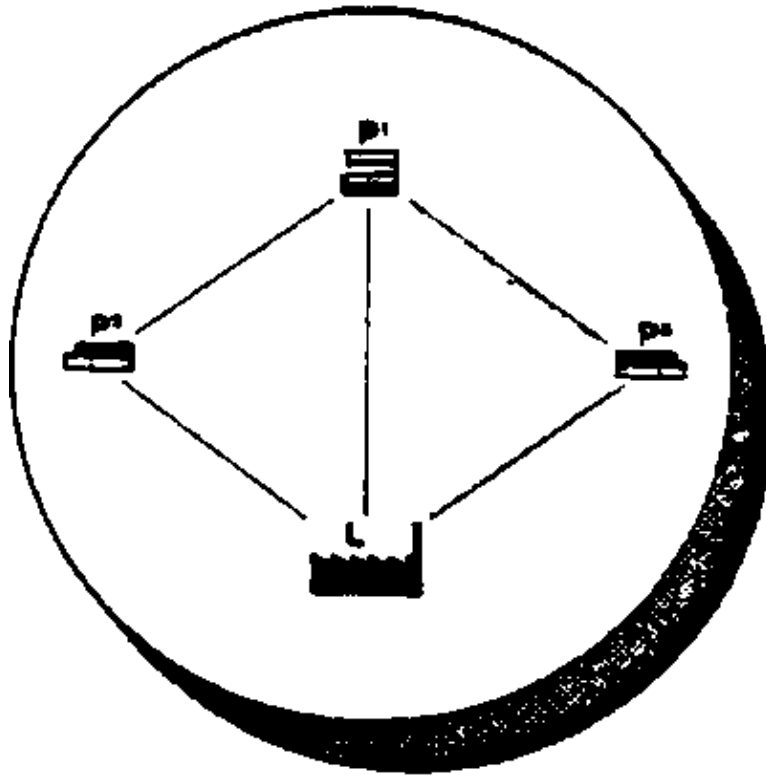
= Theoretical teaching



= Practical training in schools and theor. teaching

Training pool:

Wherever it is difficult to persuade factories to take on practical training, the training pool can provide more and better training places. This applies particularly in the case of smaller and medium-sized factories. In the Federal Republic, different variants of the training pool have proved to be effective.

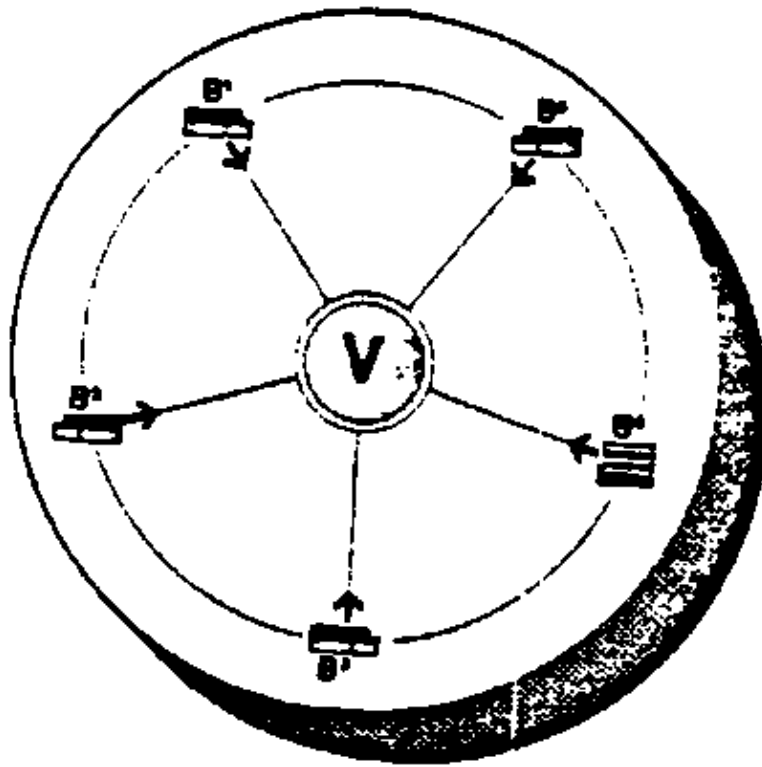


One variant is the training pool with a head factory. In this variant, the head factory (L) is predominantly suited for practical training, the partner factories (P) only partially so. The head factory here concludes the training contract, generally also pays remuneration for training and coordinates training with the partners. The partner factories take over sections of practical training and are mentioned as supplementary training factories in the contracts. The sections of training taken over by the partner factories are an integral part of the organization of training in terms of time and subject matter (cf. 3.4).

... with head factory

A different variation is the training association. Factories not fully capable of giving training come together in a training association (V), which represents the member factories (B) as contractual partner and coordinator.

... as training association



Within the training association, a coordinator is responsible for overall planning of training and supervises its execution. The members in the training association make payments to a communal account from which remuneration for training and other costs are to be paid. This association has "passive", i.e. only paying members, in addition to "active" members.

... as consortium, or with joint basic training

1. Teaching workshop: in-factory, study corner, outside factory

Apart from these two variants, a whole series of other models have been formed for the training pool, which have lead to the fact that more and better training places have been offered; this applies above all to the training pool as a consortium and to the pool with joint basic training. It has already been mentioned that practical training can also be conducted in teaching workshops in a factory. These then consist of separate departments with specially seconded trainers, or of a study corner without a separate room and specifically seconded trainers, or the teaching workshop outside the factory in which training is conducted simultaneously for several factories by full-time trainers.

2. Workplace

Teaching workshops always make it more simple to implement practical training more systematically. On the other hand, they do not ensure the completely irreplaceable contact to practice necessary for fully efficient training. This inevitably is the case, however, at the second place of learning in the factory, the workplace. The apprentice here forms a part of the current process of production. Learning by applying and practising, accompanied by teaching discourse, is here in the foreground.

3. In-factory teaching

In addition, a third in-factory place of learning needs to be mentioned: in-factory theoretical teaching. This above all consists of teaching generally more complicated theoretical knowledge, which is directly related to practical training or production in the factory and cannot be taught at other places of learning (e.g. vocational school). Depending on how great a share the three in-factory places of learning mentioned above have within a total course of training, there are different results from one profession to the next with respect to suitability in terms of examinations, profession, factory, democracy and further training.

4.4 Factory as main place of learning

Factory: closeness to practice, problem of numbers

The factory as a place of learning is irreplaceable for fully efficient training, on account of its completely essential closeness to practice. But it is also so for another reason. Without the factories taking on training, there would be an insoluble problem of numbers. To carry out practical training in schools alone would exceed the financial resources of all public budgets; above all in developing countries.

Historical circumstances

Wherever training has always traditionally taken place without interruption in factories (Federal Republic, GDR, Austria, Switzerland), there are generally no problems in persuading factories to take on training. The situation is different, however, where training originally conducted in factories has long since been transferred by the state to schools (France, Belgium), or where there never has been training in factories (developing countries).

Advertising, advice, financial aid

Training contract

Model training contract

Where it is a question of persuading factories to take on training for the first time, it is necessary to advertise accordingly, to advise factories or to grant them financial incentives, e.g. by tax relief. To enforce an obligation to carry out training by law, should be rejected in the case of private factories. Nevertheless, it is worth considering whether factories not conducting training should be enlisted to finance training factories. When a factory decides to conduct training, the training contract is then of decisive importance. This contract is concluded in the Federal Republic between the factory and the apprentice, and – in the case of persons under-age – by their legal guardian. The contract is entered in the catalogue of professional training relationships by the body responsible (Chamber). The Vocational Training Act of the Federal Republic prescribes (§4) what minimum details need to be included in the written record of the contract. For the actual layout of the contract, there is a model training contract in the Federal Republic, containing 11 paragraphs. As an appendix to the training contract in the Federal Republic, details need to be noted on the organization of the training course in terms of subject matter and time.

4.5 Suitability as training factory

Entitlement to employ and train persons

Not every factory should be allowed to conduct training. Permission should be made dependent on the fulfilment of certain minimum requirements, so that the young person really does receive high-quality training. It is therefore stipulated in the Vocational Training Act of the Federal Republic who is entitled to employ and train persons (§ 20 –21), when a factory is suitable for training (§ 21), and who has to determine and supervise this suitability (§§ 23 – 24).

Trainer/master craftsman

Suitability as a training factory

Thus, for example, only a person who has completed his 24th year of age, who has successfully passed the final examination in a subject corresponding to the training profession, and has verified his suitability in professional and labour education, is allowed to conduct training, for example, in the sector of the manufacturing industry. Successful completion of the examination as a master craftsman also entitles a person to conduct training in the Federal Republic.

There are specific criteria in the Federal Republic to establish the suitability of a factory as a training factory, which act as a guideline for responsible bodies when inspecting a factory as a training factory.

Tasks

Examples for application

1. How do you judge the fact that the institution of the school is questioned, particularly with respect to professional education?
2. At what places of learning in your country do practical training and theoretical teaching mainly take place?
3.
 - a) Using the models in No. 4.3, give an outline of the combination between practical training and theoretical teaching typical for your country.
 - b) What possibilities do you see for implementing a pool of places of learning in your country, on the model of the Federal Republic of Germany?
4. How is the essential contact with practice achieved within professional training in your country?
5. How is the suitability of factories for training regulated in your country, insofar as they take on training?

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5. How can professional qualifications be verified?

Guiding questions

- What importance do professional examinations have?
- Who is to be admitted to examinations?
- What is to be examined?
- How are topics to be examined?
- Who is to examine?
- What rights are granted by having passed examinations?

5.1 Importance of professional examinations

Concept

Professional examinations are the controlling instruments preferred for supervising permission to carry out a certain profession. They are distinguished from general examinations (e.g. university entrance qualifications) and leisure examinations (e.g. helmsman's certificate).

Importance

Examinations reinforce the efficiency of training measures and, when they are controlled centrally, have the effect of unifying the objective and contents of training and the level of achievement. Examination certificates with which certain entitlements are associated, which increase the chances of professional advancement, which result in an improvement of one's wage scale, or grant coveted, protected professional titles, increase general interest in participating in training measures. They also increase the professional pride of the holder of the certificate. The latter consideration is important, particularly for those countries in which little esteem is attached to manual work.

Classification

A number of possibilities of classifying the many different examinations are conceivable; for example according to:

- contents of the examination (e.g. professions)
- the legal foundation (e.g. Vocational Training Act)
- regional regulations (e.g. Federal states in the case of full–time vocational schools)
- importance in the case of career systems (e.g. civil service)
- the educational level (e.g. first course of studies, further training)
- the moment in time within the training course (e.g. entrance, intermediate, final examination)
- the examination method (e.g. practical, written, oral, programmed)

5.2 Admission to the examination

Final examination predominates

Within the system of professional education, the final examination at the end of professional training predominates throughout the world. No other examination probably takes place as often. In the Federal Republic of Germany, these are the final examinations at the end of training within the Dual System. Under normal circumstances, the apprentice is to be admitted to the final examination when the period of training applicable in his case has elapsed, or ends not later than two months after the date of the examination. He may also be admitted earlier, insofar as the apprentice's abilities justify this (e.g. grammar school–leavers).

Admission open for all possible routes

Also to be admitted to the final examination are those persons who have been trained at a school in a subject corresponding to professional training. In this way, an important link is forged by ultimately bracketing together pure school courses of training and factory–related training. It is possible to determine which courses of training fulfil conditions by means of special regulations (Orders) . Such regulations are superfluous in countries with professional training exclusively in schools.

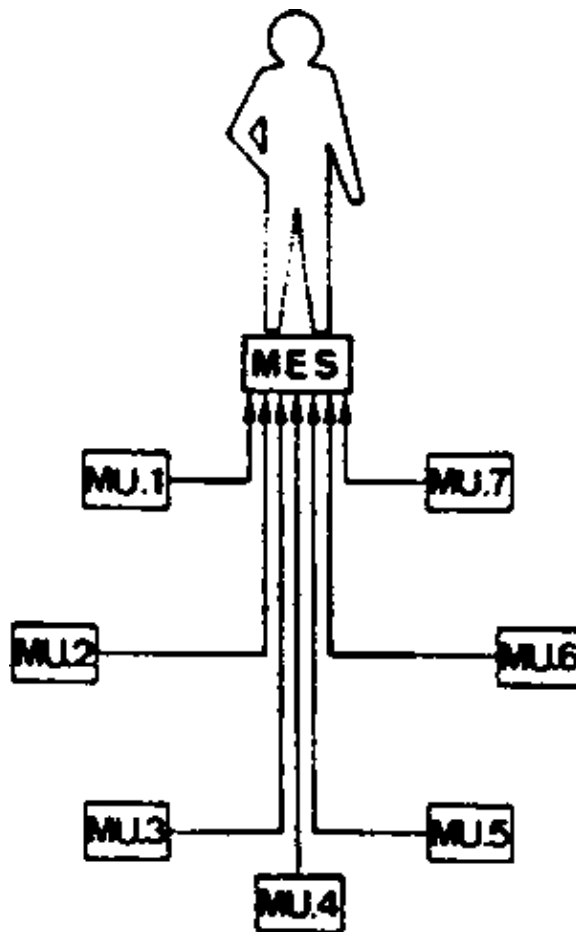
Admission also without training

Also to be admitted to the final examination are those persons who can testify that their admission is justified by submitting certificates or other forms of justification. Above all, this allows experience to be recognized by applicants who have not pursued regular professional training (e.g. have been engaged in the profession for twice the period of training).

The above regulations should also apply for parts of final examinations or part–examinations conducted in the course of professional training.

Part–examinations Controle Continue

In this way, the rigid system of a once–off, on–the–day examination at the end of long–term training becomes flexible. This is of considerable importance if training is to be conducted according to MES, or if proficiency certificates accompanying training (Controle Continue) are to replace examinations entirely or in part. It should be possible to repeat the final examination at least once.



Repeat examination

5.3 Examination requirements

City and Guilds of London Institute

The final examination is to establish whether the apprentice has achieved the aim of training or the aim of the training phase. Ultimately, this could only be really established by examining all the necessary skills and knowledge. However, this is not possible; only a very limited choice of the contents of training can be examined. Details can be laid down in special subject catalogues, such as, for example, those issued for the entire United Kingdom throughout the world by the City and Guilds of London Institute, founded in 1878.

§ 35 Vocational Training Act

The final examination in the Dual System in the Federal Republic is laid down in the Vocational Training Act. This stipulates that the final examination is to determine whether the examinee has mastered the necessary skills, whether he has the necessary practical and theoretical knowledge, and whether he is familiar with the subjects important for professional training taught in vocational school classes. Training regulations are to form the basis (§ 35). Training regulations in the Federal Republic of Germany thus have decisive importance also for examination requirements. The legal prescription that only the material taught at the vocational school is to be examined, insofar as it is important for professional training, indicates that general education subjects are also taught in the vocational schools of the Federal Republic.

5.4 Conducting the examination

Examination regulations

In the interests of conducting the final examination as objectively and uniformly as possible, regulations should be issued for conducting examinations. It is therefore prescribed in the Vocational Training Act in the Federal Republic of Germany that such examination regulations are to be issued by the bodies responsible for

the examination (§ 41); these should regulate at least the following:

- Admission
- Organization of the examination
- Standards of assessment
- Issue of examination certificates
- Consequences of breaches of examination regulations
- Repeat examinations

Model examination regulations

In addition, there are model examination regulations, serving as a uniform basis for the various individual examination regulations.

5.5 Examining boards

Trade Testing Centres:

Examinations should be conducted by objective and expert examiners, as far as possible in neutral bodies. In countries within the English sphere of influence, particularly in Africa, "Trade Testing Centres" are established for this purpose on the model of the City and Guilds of London Institute. They are subordinated to the Ministry of Labour or an appropriate office. Their sole task is to conduct professional examinations. No training centres or courses are linked with the Trade Testing Centres. Nevertheless, they publish examination regulations – in the same way as the City and Guilds of London Institute.

... responsible bodies

... expensive

Insofar as the English example is followed, the Trade Testing Centres to be established should be affiliated to existing or newly created organizations of industry, particularly the Chambers, as bodies responsible. All interested national departments (ministries), the Trade Unions and vocational schools should be involved in their management. Setting up of such examinations centres, and fitting them out with machines, tools and equipment is an expensive task, however, which will probably present problems, particularly for developing countries.

Chamber examination as an alternative

Composition of the board of examiners

For this reason, the procedure for holding the examination in the Federal Republic may perhaps provide an alternative model, because it involves less expense. The body responsible appoints the examining boards to hold the final examination. Several responsible bodies may appoint joint boards of examiners at one of the bodies (§ 36). The examining board consists of at least 3 members. The members must be well-versed in the fields to be examined, and must be suited for cooperating in examination affairs. Members of the board of examiners must contain representatives of employers and employees in equal numbers, and at least one teacher from a vocational school. At least 2/3 of the total number of members must be representatives of the employers and employees (§37).

Cost-saving by utilizing factories

Members are appointed for 3 years by the body responsible. This entails a certain number of problems if the Chambers do not take account of members proposed by employees. Nevertheless, the Chamber examinations do not entail any additional costs for establishing examination centres, because the practical examination is mainly conducted in training factories, utilizing the equipment available there.

300,000 examiners in the Federal Republic

The importance of the Chamber examinations in the Federal Republic may be seen by the fact that, on the side of the employees alone, a constant number of some 120,000 members of examining boards are trained to carry out their responsibilities (with financial support from resources of the Federal Government). This

means that the total number of members of examining boards may be estimated at approximately 300,000.

5.6 Certificates and qualifications

Integration, equality of certificates

Wherever the system of professional education forms part of the overall system of education (cf. 1.5), this also has consequences for integrating and equating certificates. The completion of professional training is then the completion of a specific level (generally the upper level) within the system of education. It provides proof that the aim of training has been achieved by successfully passing the final examination.

Part-completion

Completion of part of training provides proof that, by successfully passing a part-examination, the aim of the subsection of training has been achieved, and the qualification has been gained to continue professional training and to take up professional activity.

Equality

Completion and part-completion of professional training are to be certified by the examining board. The further courses of training to which completion or part-completion of professional training or training entitles examinees, should be established by law. This also applies analogously for other final examinations within the system of education, particularly if these are to be equated entirely or in part with the completion or part-completion of professional training.

Skilled worker certificate:

... also social functions

The board of examiners testifies that the appropriate examination has been passed successfully by means of a certificate. In the case of final training examinations in the Federal Republic of Germany these consist of the skilled worker certificate, certificate of apprenticeship or business college certificate. They are a prerequisite for adopting professional activity at the level of a skilled worker/employee. In addition, these certificates are important for further qualification measures (master craftsman, technician), and for an accompanying appointment to higher positions within the system of employment. These certificates also have an important function in the Federal Republic of Germany in a social context: social standing, the opening up of chances in life and society, the social welfare of a person are all considerably influenced by the type, length and scope of his professional training. For example, those persons successful in training professions are less frequently threatened by unemployment than unskilled persons, they have a claim to proof of sufficiently qualified professional activity, to government support in retraining and further training measures, to a pension in the event of disability, and to classification in a certain wage group.

Tasks

Examples for application

1. Where do you see the main importance of examinations to lie?
2. What is the most important professional examination in your country, and how is admission to this examination regulated?
3. How is national uniformity of requirements for a certain examination achieved in your country?
4. How is a high level of national uniformity in conducting examinations achieved in your country?
5. Where do professional examinations take place in your country, and who are the examiners?

6. What qualifications and advantages are associated with successfully completing the final examination in training in your country?

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6. How can training be supervised?

Guiding questions

- Why is supervision necessary?
- Who is to be supervised by whom?
- How is supervision to be organized?

6.1 Aim of supervision

Supervision + advice

Successful training

Past experience has shown that every regulation is only as good as the supervision ensuring that it is observed. Conducting regularized professional training measures thus lies very close to state control. This meets with very sensitive reactions by those who are controlled, above all when these consist of private training factories. It is therefore better to refer to this as supervision, which should also be further associated with advice. In any event, supervision is intended to safeguard successful training. The determining factor is the method in which those persons trained make contact with professional activities corresponding to their wishes and ideas of satisfactory professional employment.

6.2 Facilities for supervision

The question of who is to be supervised is answered by the places of learning at which professional education is taught (cf. 4.). These consist of government institutions (e.g. full-time vocational schools, training centres) or private institutions (e.g. factories).



When it is a question of supervising government institutions, this will also be conducted by government bodies. Differences are merely apparent in the form of central or decentralized supervision.



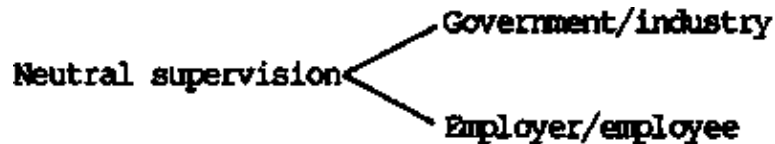
Unitary states

Central government supervision frequently takes place by way of those national ministries responsible for professional training, i.e. above all by way of national Ministries of Education and Labour.

Member states

Decentralized government supervision mostly takes place in such member states as, for example, the Federal Republic of Germany. As a rule, the Ministries of Education and Cultural Affairs in the federal states are here responsible for supervising vocational schools, insofar as they have not delegated this to subordinate authorities (e.g. Regional Commissioners).

Supervision becomes more difficult when private factories are also incorporated into professional training. It is then a question, wherever possible, of finding such bodies which are neutral in relationship to state and industry, and within industry in relationship to employer and employee.



Supervision can here in turn be also central or decentralized.

Turkey: Committee of Apprentices

Thus, for example, central supervision is implemented in Turkey by the Committee of Apprentices, whose responsibility includes carrying out supervision of how the Apprentices' Act is applied in the country (Article 46). The legislature in this country believes that it has solved the relationship government/industry by the fact that, of the eight members in the Committee of Apprentices, five are government representatives and three come from industry. The ratio of employers/employees is 2: 1 in favour of the employers.

East Africa: Labour Department

In many countries belonging to the previous sphere of English influence, above all in East Africa, central supervision of training is assigned to "Labour Departments".

India: Central Apprenticeship Adviser

Central supervision of training apprentices in India is achieved by the fact that the "Central Apprenticeship Adviser" is entitled, personally or by means of representatives (Deputy Assistants), to carry out inspections of training centres throughout the country at any time, in order to ensure that the Apprentices' Act is properly implemented.

Taiwan: District Administration

Decentralized, neutral supervision is frequently expected, as in Taiwan, for example, from "District Administrations". These are intended to support training centres in the country, and to supervise training of apprentices in factories.

Latin America: Training Centres

Peru: Senati

Wherever training centres have been set up to conduct professional training in its entirety (practice and theory), above all in Latin America, these have also been given the responsibility of supervising the associated training factories. The relationship between government and industry and employers and employees is organized here in such a way that in the decision-making bodies of such centres (e.g. in the National Committee of the Senati, Peru, Consejo Nacional), in addition to government representatives, representatives of employers and employees are also represented and have a vote. Admittedly, here too government representatives are generally in a majority.

Federal Republic: responsible bodies

In addition to training centres, other bodies, particularly Chambers of Industry, are also worthy of consideration for decentralized supervision of factory training. In the Federal Republic of Germany, supervision of professional training has been assigned to the Chambers and other "responsible bodies" by means of the Vocational Training Act.

6.3 Methods and means of supervision

Responsible body = Chamber

Approx. 150 Chambers

The Vocational Training Act in the Federal Republic of Germany delegates responsibility for professional education to the self-administrative institutions of industry (Chambers) in accordance with §§ 74 ff. These "responsible bodies" – as may be seen in the following outline – have a wide variety of important responsibilities, of which the most important are testing the suitability of training centres and trainers, holding intermediate and final examinations, and supervising and advising factories and training centres and/or trainers and apprentices. With the exception of the public services, for which other administrative authorities are employed as responsible bodies, there are some 150 Chambers for the individual branches of industry.

Supervisory tasks of the Chambers

- 0 Supervision of the personal and technical aptitude of trainers and instructors
- 0 Supervision of the suitability of the training centre
- 0 Authority to issue directives to trainers
- 0 Obligation to report to responsible authority
- 0 Establishment and upkeep of the catalogue of professional training relationships
- 0 Entries, modifications and cancellations in the catalogue of professional training relationships
- 0 Conducting of final examinations
- 0 Issuing of examination certificates
- 0 Appointment of examining boards
- 0 Examining boards to be appointed in accordance with § 33, Para 1 of the Law for the Regulation of Handicrafts, or where applicable to be properly appointed by authorized manual trade guilds
- 0 Appointment and dismissal of members of examining boards
- 0 Chairmanship, quorum and voting in examining board
- 0 Admission to final examination
- 0 Admission to examination under special circumstances
- 0 Issuing of examination regulations
- 0 Conducting of intermediate examinations
- 0 Proper appointment of examining board for intermediate examinations
- 0 General supervision
- 0 Utilization of vocational advisors for training
- 0 Advice to trainers and apprentices
- 0 Regulation of examinations in further professional training
- 0 Appointment of examining boards
- 0 Appointment and dismissal of members of examining boards
- 000 Regulation of examinations in professional retraining Appointment of examining boards
- Supervision of professional retraining
- 0

Supervision of training and retraining suitable for handicapped persons in recognized training professions of professions specific to handicapped persons

- 0 Supervision of training/retraining and examination procedure adapted to the special circumstances of handicapped persons
- 0 Supervision of the personal and technical aptitude of trainers and instructors adapted to the special conditions of handicapped persons, also in retraining
- 0 Supervision of the specific suitability of the training and retraining centre for handicapped persons, also with respect to the presence of special supportive (medical, psychological and social) services
- 0 Use of appropriately trained vocational advisers for training
- 0 Determining breaches of regulations

This outline contains the most important elements of supervision, which can be supplemented by the following examples taken from the obligations of trainers in accordance with § 6 of the Vocational Training Act.

Elements of supervision (§ 6 Vocational Training Act)

- 0 Systematic organization of professional training in terms of time schedules and contents
- 0 Commitment or authorization of the trainer to carry out training
- 0 Provision of adequate training and examination resources
- 0 Encouragement to attend vocational schools
- 0 Keeping of a record of training
- 0 Formation of the character of apprentices and protection from moral and physical danger
- 0 Performance of activities exclusively related to training
- 0 Provision of adequate training and examination resources; costs to be borne by apprentices, also in the case of handicapped persons, only insofar as training is conducted in public welfare training organizations above single factory level and specific to handicapped persons, in professional education establishments or establishments for the promotion of professional education, and an authority responsible for rehabilitation measures is available
- 0 Training suited for handicapped persons in recognized training professions or professions specific to handicapped persons
- 0 Adaptation of the training and examination procedure to the special circumstances of handicapped persons

Vocational advisers for training

Discovery of shortcomings

In accordance with § 45 of the Vocational Training Act, the responsible authorities have to appoint vocational training advisors for the tasks of supervising and counselling. As representatives of the Chambers, they frequently have a dual role, namely on the one hand to promote and give advice on professional education, and on the other hand to function as supervisors.

The advisor in matters of training fulfils his task in particular by acquiring information and by visiting training centres at regular intervals, or also in answer to complaints. If shortcomings determined by the training advisor are not eliminated in spite of the appropriate summons, notification should be made to the responsible regional authority. These may prohibit the institution from carrying out training if necessary.

The training advisors are themselves to be suitable trainers, should have many years' professional experience, and as far as possible be appointed for specific subjects. Their numbers should be determined in such a way that each training centre can be visited at least once per year.

Intensive counselling

In 1984, some 1,320 full-time vocational advisors for training were engaged in all branches of industry. In addition, particularly in the manual trades, there is a high number of honorary apprentice custodians (approx. 6,000), which admittedly fulfil advisory and supervisory tasks to a much smaller extent. In all, there are 2,600 apprentices or 500 training centres per full-time training advisor; in the sector of the Chamber of Crafts, the figures are 5,000 trainees or 1,800 training centres.

Supervision of professional education requires constant cooperation between those involved in professional education, departments in factories, particularly management, works council and trainers, vocational schools, responsible bodies, authorities and public law institutions.

Supervision of the vocational school

Those vocational schools subject to federal state school legislation are not covered by the Vocational Training Act. Nevertheless, there is a factual and causal relationship between federal state school legislation and the Vocational Training Act, providing the basis for school-related obligations within the framework of in-factory professional training. The federal states have their own regulations for supervising vocational schools.

Giving of information

The trainers are committed to give the necessary information for supervision; in addition, apprentices, parents and guardians, and works councils may also pass on information. The procedure should be methodical and systematic. For only such a procedure when using resources will provide a solution to the task of safeguarding the quality of professional education. Selected examples thus aid the bodies involved to improve implementing their supervisory measures for professional education and vocational counselling for training.

Methods of supervision

Elements of Supervision	Methods
§ 1 Vocational Training Act, in conjunction with § 25 Vocational Training Act/Law for the Regulation of Handicrafts Broadly based basic professional education, technical skills and knowledge, professional experience.	Inspections of training records, comparison with organization of time schedule and contents and with means of regulation, fixing of the results of examinations.
§§3 and 4 Vocational Training Act Contract of professional training	Determining contractual agreements. Supervision of all stipulations in contract. Comparison of organization of time schedule and contents with means of regulation.
§ 5 Vocational Training Act Invalid agreements	Supervision of contracts and any additional agreements by interviewing contractual parties. Establishment of errors, notification of appropriate bodies, initiation and implementation of measures.
§ 6 Vocational Training Act Skills and knowledge Aim of Training Regular training, organized in terms of contents and time schedule	Comparison of training records with organization of time schedule and contents, comparison of organization of time schedule and contents with basic outline training course.
Appointment of trainers	Observation of trainer aptitude regulations
Training resources free of charge	Interviewing apprentices and trainers
Encouragement to attend vocational schools	Interviewing contractual parties and parents and guardians, discussions with class teacher.

Rectification of faults

If faults are found, these should be initially rectified in a personal discussion, by written notification, instructions and orders, provide the fault can be rectified and no danger is to be expected for the apprentice. If

the fault cannot be rectified, or if danger to the apprentice is to be expected, or if the fault is not corrected within the legal time limit, the responsible bodies are to notify the appropriate authorities.

Tasks

Examples for application

1. What do you see as the main purpose of supervising professional training?
2. What institutions for professional education (places of learning) are supervised in your country by which body?
3. How is supervision assured in your country (law, orders)?
4. Name a number of typical examples for elements of supervision in your country!
5. What methods of supervision are employed in your country?
6. Is supervision in your country to be regarded more as control, or also combined with advice?

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Guiding questions

7. What importance does participation have in professional education?

- Why is participation necessary?
- Who participates in which bodies?
- For which questions is participation important?
- How can participation be assured?

7.1 Purpose of participation

Adapting responsibility and safeguarding interests

The main question is which social groups are to participate at which points in a system of professional education. It is not a question of who is directly involved in actually conducting training measures (e.g.: trainers, teachers, apprentices). Important social groups for professional education attempt to exert influence within the scope of their legal responsibility or their interests. Apart from the state, these are above all employer and employee organizations, political parties, churches, associations, etc.

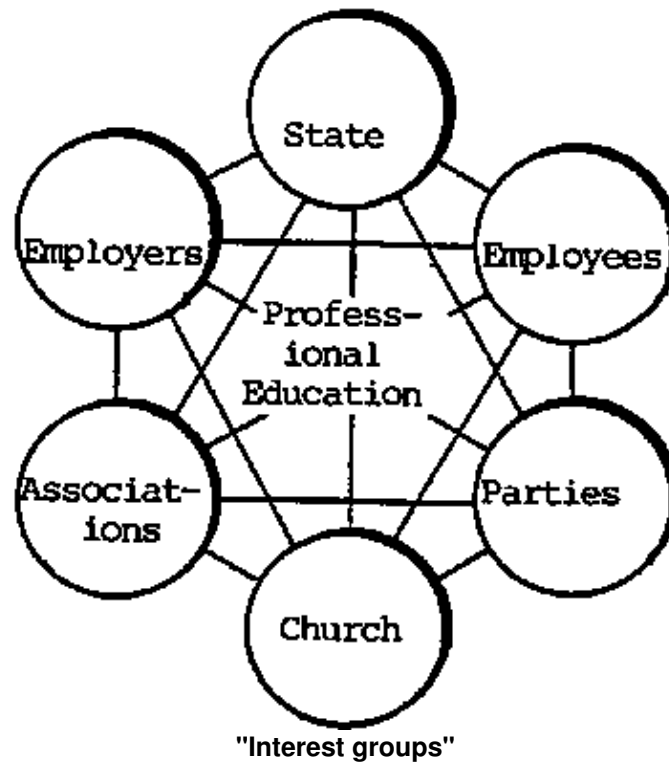
Co-determination and co-responsibility

In professional education, participation – including co-determination and co-responsibility – is necessary in various ways by all those involved. It should make use of the experience and interests of those active in industry for government action. It should also assure the equivalent influence of employers and employees; and it is to make it possible for those directly involved to participate in organizing and taking decisions on their professional education.

Not only advisory capacity

It should be safeguarded by law that the groups involved are sufficiently able to fulfil this function of participation in administrative institutions. The groups involved should not only have an advisory function, but,

insofar as this is legally possible and materially necessary, also have an influence on how the appropriate bodies are involved. Their expertise should be utilized optimally, and the involvement of industry promoted to the best of its ability.



7.2 Participation bodies

Federal Republic: legal regulation

In the Federal Republic of Germany, the rights of participation by employers and employees are governed by law (Vocational Training Act, Law to Promote Professional Education, Labour-Management Relations Act). The fact that the interaction of employers and employees in professional education is regulated by law, may not lead one to assume that this would have been so ordained by the legislature in the Federal Republic without question. The opposite is more the case. The legislature adopted and gave legal foundation to the desire by the social partners for as widely based a participation in planning and executing professional education as possible, which was also in its own interests.

Extra-legal contacts

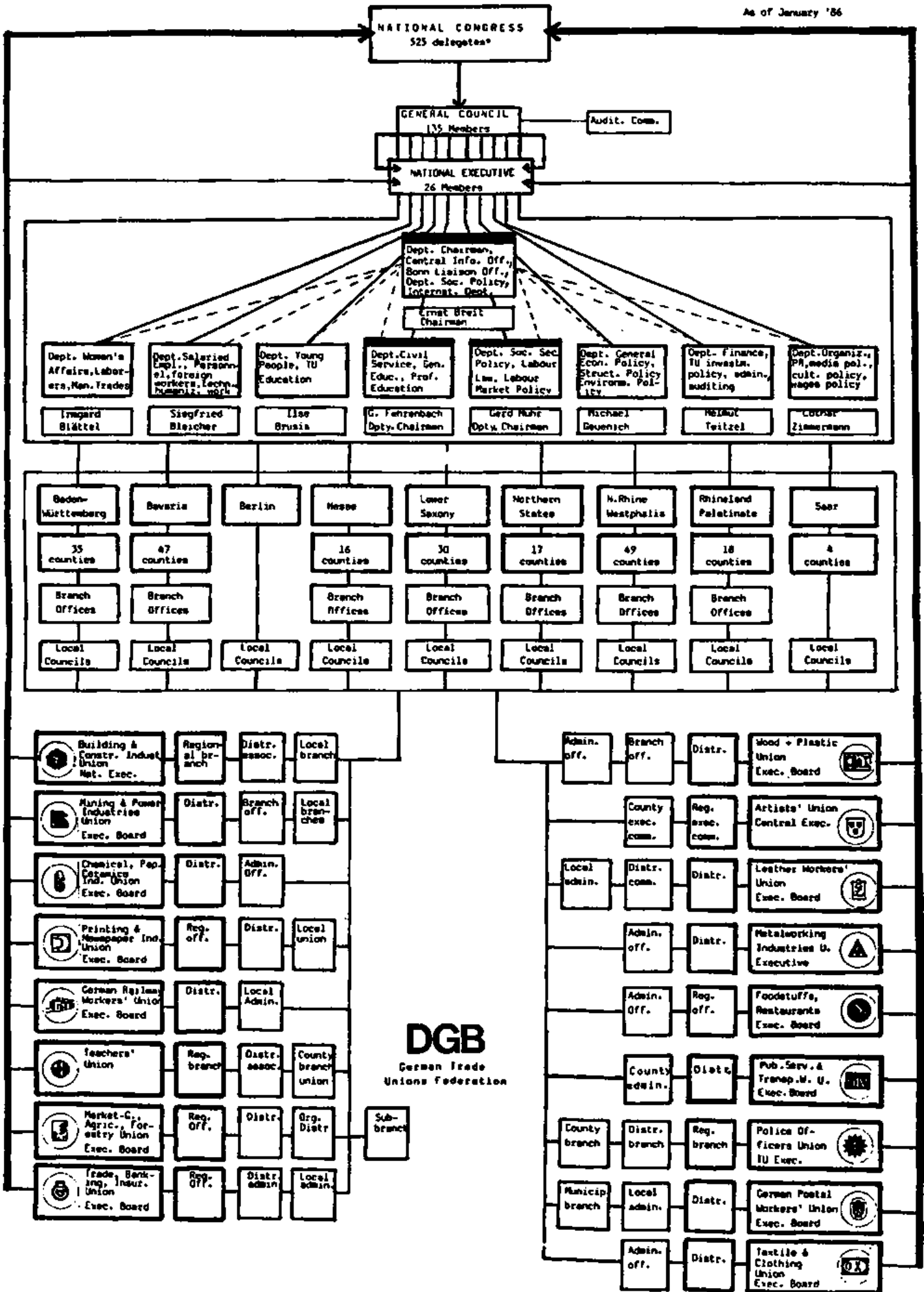
Apart from legally formalized and institutionalized interaction, there are nevertheless additional contacts among social partners and with government bodies, which, although they cannot be represented clearly, are also of great importance.

Central organizations

It is an advantage for the frequently difficult matter of reaching agreement, in the interest of as uniform as possible a development of the system of professional education in a country, for employers and employees to be organized in central organizations. As an example for such organizations in the Federal Republic of Germany, mention will here be made to the Board of German Industry for Professional Education and to the German Trade Unions Federation.

On the employee side, 17 individual trade unions are unified by way of 9 regional offices into the German Trade Union Federation.

Example: German Trade Unions Federation

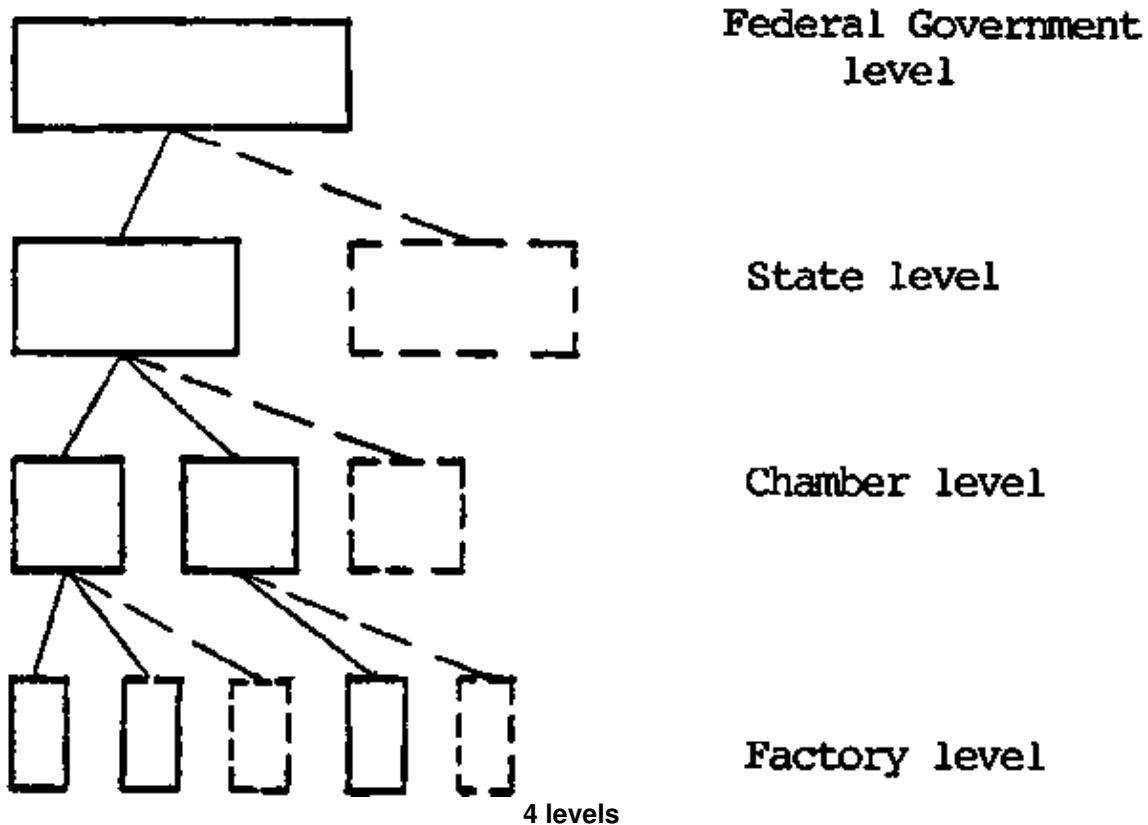


* 1982, irrespective of state of membership

Diagram of the Organization German Trade Unions Federation

Bodies in member states

In the majority of cases, participation takes place in regionally separate bodies. This applies above all for member states (federal states), such as those in the Federal Republic of Germany. In the Federal Republic, four levels may be defined at which participation takes place:



Central Committee of the Federal Institute for Professional Education

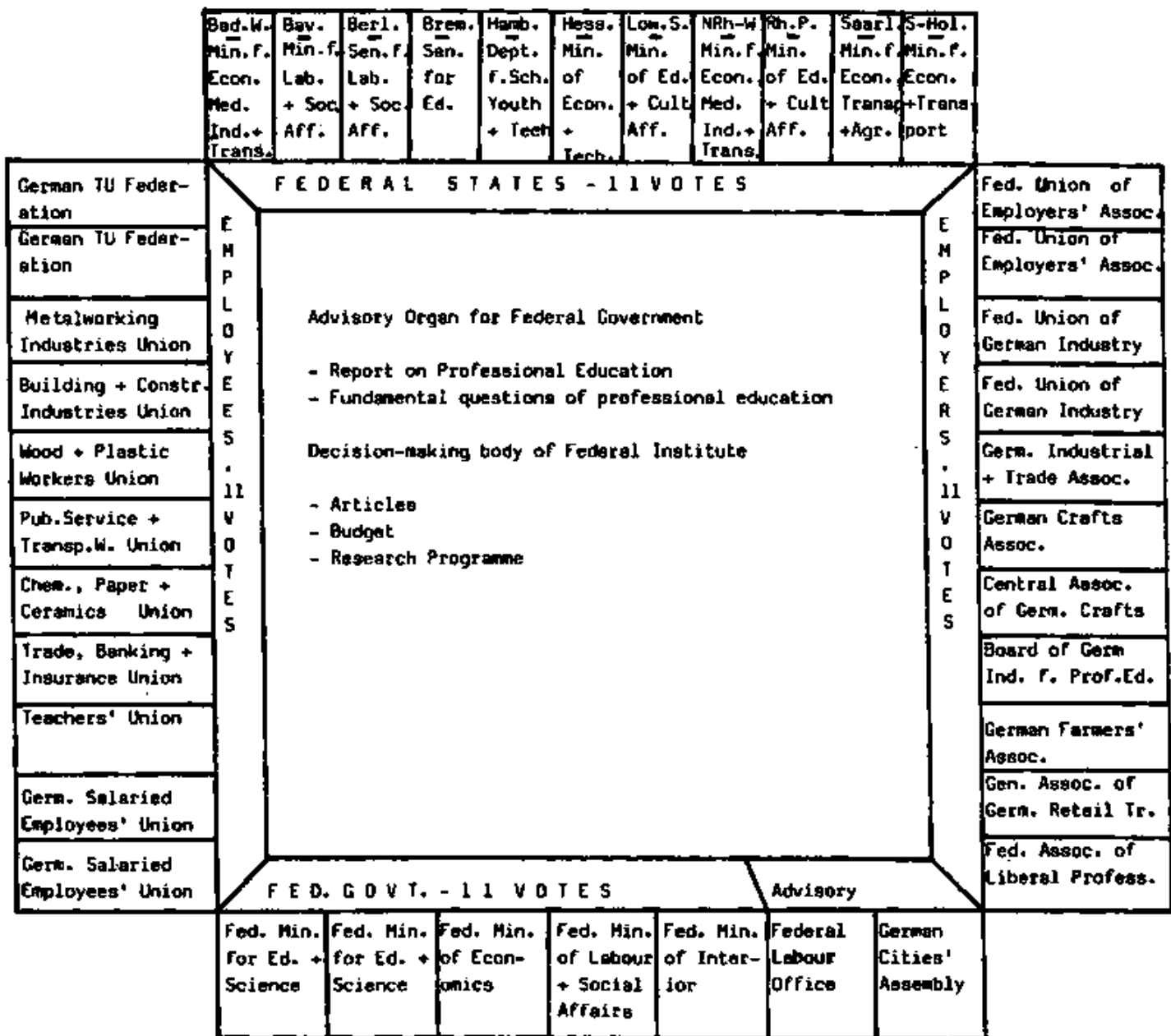
Regional Committees

Professional Education Committee Labour-Management Relations Act

At the Federal Government level, interaction between employers and employees mainly takes place according to the Law to Promote Professional Education in the Central Committee of the Federal Institute for Professional Education. The distribution of responsibilities in professional education demands in principle the same interaction between employers and employees at state level as at the Federal Government level. For this reason, to comply with the Vocational Training Act, Regional Committees for Professional Education have been set up at state level in each of the State Governments. Each Chamber (responsible body) has a Professional Education Committee as the body responsible for participation and co-determination in fulfilling its tasks. Broadly based regulations have been included in the Labour-Management Relations Act for participation at factory level.

The Central Committee of the Federal Institute for Professional Education consists of 11 delegates each from the employers, the employees and the federal states, together with 5 delegates from the Federal Government. The delegates from the Federal Government have 11 votes which may only be given uniformly. 1 delegate from the Federal Labour Office and 1 delegate from the central municipal bodies in existence at a federal level may take part in the meetings of the Central Committee in an advisory capacity.

4 "benches" of the Central Committee of the Federal Institute for Professional Education



GENERAL COMMITTEE

7.3 Subject of participation

Naturally, not all questions can and should be subject to participation. Self-responsibility may not be suffocated by too much participation. It is important to filter out the essential questions for participation. At the federal level in the Federal Republic, these are for the Central Committee of the Federal Institute mainly as follows:

Questions of participation at a federal level

1. Following instructions by the responsible Government Minister
 - a) to cooperate in preparing training regulations and other legal orders to be issued in accordance with the Vocational Training Act or Part 2 of the Law for the regulation of Handicrafts;
 - b) to cooperate in preparing the Report on Professional Education (§ 3);
 - c) to cooperate in drawing up professional education statistics on the basis of § 4;

2.

To support the planning, establishment and further development of professional training centres outside of one factory according to general administrative regulations of the responsible Government Minister;

3. To give advice to the Federal Government in questions of professional education;
4. To carry out research into professional education according to the research programme to be passed by the Central Committee (§ 8), to supervise experimental models and to promote educational technology by means of research; the research programme shall require the approval of the responsible Government Minister; the most important findings of research into professional education are to be published;
5. To keep, produce and publish the catalogue of recognized training professions;
6. a) In accordance with § 19, Para 2, Section 2 of the Law for the Protection of Distance Education, to inspect professional education correspondence courses and to comment on such correspondence courses in accordance with § 19, Para 2, Section 3 of the Law for the Protection of Distance Education before they are approved, insofar as state law in conformity with these regulations shall provide for a decision in agreement with the Federal Institute for Professional Education;
- b) To approve correspondence courses as being suitable in accordance with § 15, Para 1 of the Law for the Protection of Distance Education;
- c) To comment on correspondence courses on professional education not covered by the Law for the Protection of Distance Education by way of administrative assistance;
- d) To contribute to the improvement and expansion of professional education distance teaching by research and by promotion of development projects;
- e) To give advice to organizers in developing and conducting professional education correspondence courses, and to provide information on professional education correspondence courses within the scope of the responsibilities listed under a) and b);

7.4 Safeguarding of participation

Reference has already been made to the fact that participation should as far as possible be implemented by means of legal stipulations. Reference has also been made to the informal contacts outside of legally regulated participation. Both forms presuppose that the social groups intending to participate are prepared and capable to do so. Above all, however, governments and/or the legislature needs to recognize the importance of participation, and to act accordingly.

No ILO concept on co-determination

CINTERFOR: tripartismo

Generally valid and basic comments on such questions related to professional education are expectedly made by the ILO. Since its foundation in 1919, the ILO has included in its objectives the aim of supporting its member states in building up systems of professional education. The Board of Directors of the ILO is composed of representatives of member governments, and of employer and employee organizations in member states. The aims and composition of the ILO have nevertheless not lead to a uniform concept throughout the world of cooperation between employers and employees in the field of professional education. Nevertheless, the Centre for Inter-American Research and Documentation into Professional Education (CINTERFOR) in Montevideo, founded by the ILO in 1962, is attempting to develop such a concept for the American member states of the ILO. At all appropriate conferences held since the foundation of CINTERFOR, cooperation between governments, employers and employees (tripartismo) has been emphasized as being essential for building up national systems of professional education.

Typical for developing countries

Several publications by CINTERFOR contain accounts of the situation in Latin America; this will no doubt also be typical for many other developing countries.

Employees

The lack of organization among employees makes contact to the factory floor difficult, and obstructs internal democracy. It limits the financial freedom of trade unions, and results in insufficient active members being available to fulfil their wide variety of responsibilities in the context of participating in questions of professional education. This makes it difficult to attain a sufficiently strong negotiating position.

Employers

Employers in Latin America generally seem opposed to participation at the factory level. In contrast, they would seem prepared to accept even equal co-determination of employees in the advisory bodies to professional education institutions outside of one factory.

Governments

Governments are those bodies mainly responsible for participation. They can influence the efforts of social groups and even bring them to a fall. For this reason, they have a particularly high level of responsibility in this sector. Governments must always be ready to start discussions so that participation comes about at all, and to accept the rules of such discussions – in the same way – or even more obviously than employees and employers. Observance of such rules in Latin America leaves very much to be desired. Apparently, the desire exists in many cases to control the social partners, particularly the trade unions. There is also resistance to recognizing their representatives as even being parties to discussion, or commissions and advisory boards are appointed with too unspecific and too inadequate an authority.

Tasks

Examples for application

1. Where do you see the importance of participation in professional education to lie?
2. Which social groups in your country are involved in participation, or should be involved?
3. Outline those co-determination bodies which exist, if applicable (cf. diagram on 7.2)!
4. Name important questions subject to co-determination in your country, and indicate which body is concerned with these questions!
5. Name examples of how questions requiring co-determination are decided in your country, and which of these are subject to the principle of agreement!
6. In which way is participation safeguarded in your country?

Bibliography

For further reading

MASLANKOWSKI, WILLI: Professional Education in Developing Countries. The Problem of Co-Determination from the German and Latin American Standpoint. In: Anuario. Münster 10/1983, pp. 5 – 45

8. Is there a model organization of professional education?

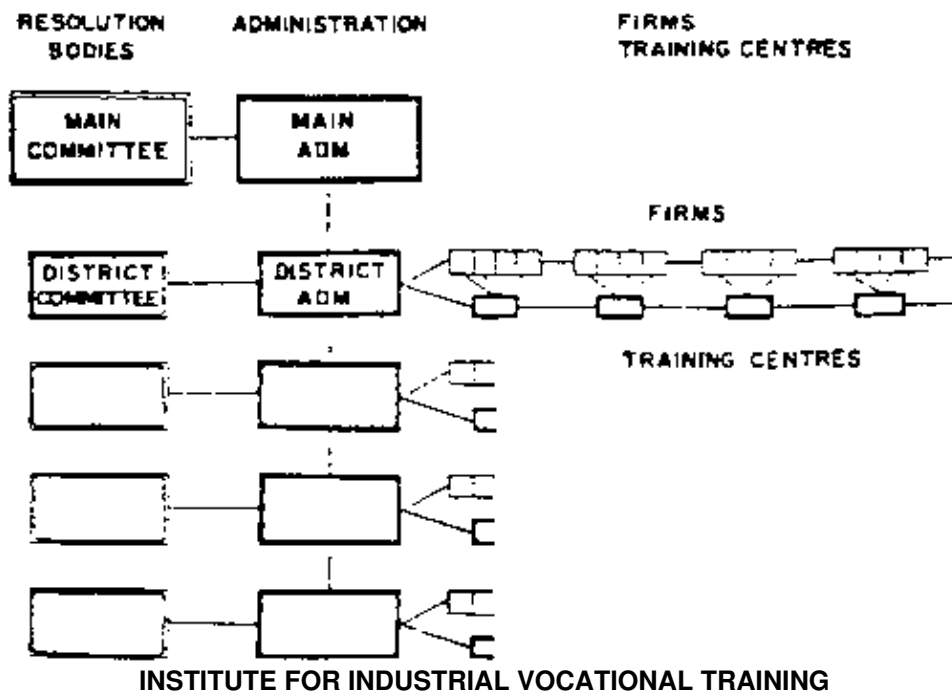
Guiding questions

- Who might be the body responsible for such a system?
- Which decision-making and administrative bodies might be established?
- Who might be trained in which professions?
- At which places of learning might training take place?
- Who might conduct which professional examinations?
- How might financing be safeguarded?

8.1 Responsible bodies

On the basis of evaluating findings in the Federal Republic of Germany and in numerous developing countries, particularly in Brazil and the former English sphere of influence abroad, a model professional education institution has been planned for a whole country (WISSING 1968).

National Service for Professional Education



Intended to: regulate, train, examine ...

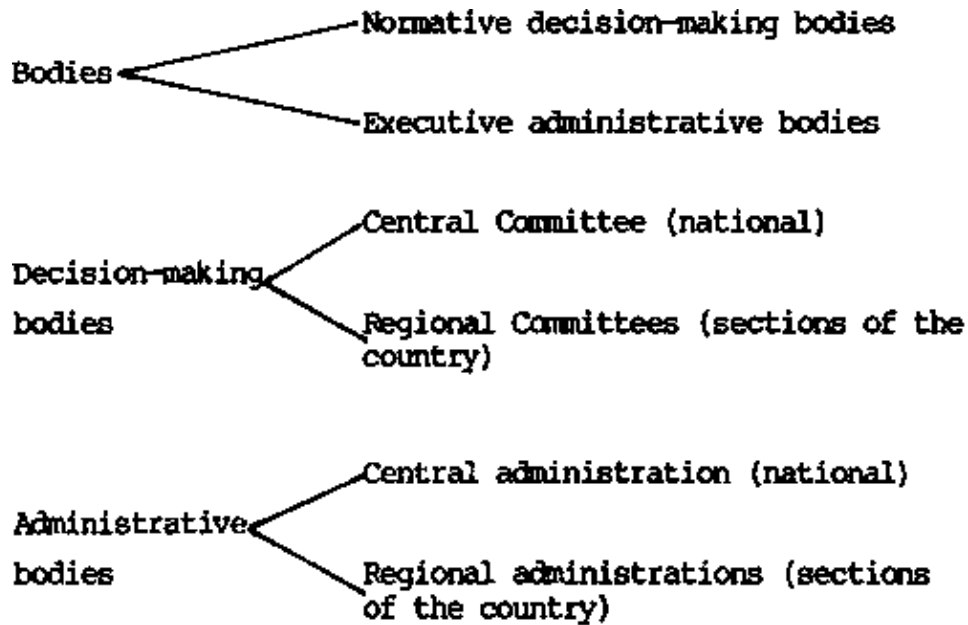
The institution consists of a National Service for Professional Education, referred to below in short as National Service. It is intended to regulate the professional education of experts in close cooperation with the organizations of employers and the trade unions, together with private and public undertakings, with cooperation by representatives of the state; to initiate the necessary measures for such cooperation, including the establishment, upkeep and supervision of training centres for practical training and theoretical teaching; and to carry out professional examinations.

... advise

The National Service is intended to be an advisory body to the Government in all matters associated with professional education. It is to be autonomous, and supported by the employers. The National Service should, as far as possible, be a public-law institution.

8.2 Decision-making and administrative institutions

Organization



Composition of the decision-making bodies

NO government majority

The decision-making bodies are composed of representatives from the organizations of industry, the trade unions and the state, together with the director of the administrative body responsible. Involvement in the decision-making bodies is honorary. Whether the organizations of employers, the trade unions and government institutions are to be represented equally or what equal relationship is to be implemented, will have to be organized differently from country to country. It is not possible to establish a generally valid principle for this. Thus, for example, the decision to be taken in this direction will be influenced by the level of factory co-determination by employees, or by the number and size of public companies. There are a number of good reasons for keeping the number of representatives from government institutions, such as, for example, the Ministries of Economics, Labour and Education, at least not greater than 1/3 of the total number of members in any decision-making body.

8.3 Initial professional training

Central Committee decides

Recognition of a profession as a training profession, and fixing of the length of training is decided by the Central Committee. The Central Committee also determines how many apprentices in one training profession may be trained at the same time in one firm – related to the number of experts in the appropriate profession employed in the company.

Regional Committee decides and gives advice

The responsible Regional Committee decides, on the basis of guidelines passed by the Central Committee, whether a company may train apprentices. The regional administrations give advice to companies in questions of training, and supervise training in the companies.

Training contract

The apprentices must have completed full-time compulsory education, and be at least 14 years of age. Appointment of an apprentice/trainee shall be on the basis of a written training contract (in accordance with a prescribed model), which is to be submitted to the responsible regional administration for registration. Training is completed by an examination.

8.4 Training Centres

The National Service sets up its own training centres. Large companies can set up training centres outside of production workshops at their own expense, on the approval of the National Service. In such cases, the "general contributions" to be paid by companies will be reduced.

Practical training and theoretical teaching

Depending on requirements, the training centres provide both practical training and theoretical teaching in the form of full-time or part-time classes.

The training centres have the following tasks:

Tasks in training

- Cooperation in training apprentices
- Training of future master craftsmen
- Further training of experts employed in workshops

Supervisory function

Supervision of the training centres is by the responsible regional administration in each case.

8.5 Professional examinations

Holding examinations

National service holds professional examinations, with the cooperation of representatives of the organizations of employers, the trade unions, government bodies, vocational schools and training centres. The examinations are held in the Training Centres of the National Service. They are held for various professional levels. (e.g. MES certificates, skilled workers, master craftsmen).

Examining boards

The members of the examining boards (except for examinations as master craftsman) are appointed by the responsible Regional Committee in each case for a period of 3 years. The members of the examining boards for the examinations leading to a master craftsman are appointed by the responsible Minister (e.g. Minister of Economics) on the suggestion of the Central Committee.

Admission

Everyone who fulfils the entry conditions can be admitted to the examinations, irrespective of where he has been trained or where he has gained the necessary professional experience.

Certificate

When a candidate successfully passes a professional examination, he is given a Professional Qualification Certificate, indicating for which profession and which professional level he has successfully passed the examination, and which (legally protected) professional title the holder of the certificate is entitled to use.

8.6 Financing

1% of wages and salaries

To cover the expense of the National Service, private and public companies have to pay a monthly "general contribution" of approximately 1% of the total wages and salaries paid to those employed in company workshops. Companies with more than 500 employees have to pay an "additional contribution" of 1/4 of the "general contribution".

Collection

Collection of the contributions to be paid by companies and of any fines is carried out monthly, together with social security contributions (or where there is no social insurance, by the tax authorities).

Distribution of resources

Of the sums collected, the Central Administration is to receive 15% and the Regional Administration responsible in each case 85%, after deduction of 1% to finance the collecting bodies.

Budgets

The budget of a Regional Administration is approved by the responsible Regional Committee, and the budget of the Central Administration by the Central Committee. All approved budgets are forwarded by the Central Administration to the responsible Minister (e.g. Minister of Economics) for purposes of information.

Auditing

The central government auditing office is responsible for audits.

Tasks

Examples for application

1. If a system of professional education exists in your country following the above model system, name the deviations and reasons for them, if applicable!
2. If a system exists in your country which completely differs from the above model system (or if no system exists), how do you see the application of this system in your country?

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For further reading

WISSING, Jürgen: Model for an Autonomous Organization of Industrial Professional Training. In: the German Vocational School and Specialized Technical College. Wiesbaden. Number 9/1968. pp. 649 – 660

