Helmut Pütz

Vocational Education and Training – An Overview

Federal Institute for Vocational Training · Bonn

Federal Institute for Vocational Training



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Preface

The publication of "Vocational Education and Training – An Overview" was preceded by a lengthy period of development which began at the Federal Institute for Vocational Training with Hermann Schmidt's "Qualifying the Workforce – Education and Training for an Age of Uncertainty" in 1994. For many years there has been a high demand for publications in English about the German system of vocational and further training, and particularly for a short, schematic representation which can serve as a template, which in turn can be used in English language presentations. Now the members of the board of the Federal Institute for Vocational Training have also requested an outline of this type, not least in order to be able to manage their frequent presentations in English for foreign listeners better.

This publication is therefore aimed at anyone involved in vocational and further training who needs to present and explain the German system of vocational training at home and abroad. Often, however, the requisite up-to-date English language skills are unfortunately lacking. The following representation, which can easily be converted into slides, is intended to serve as a thematic, linguistic and descriptive framework in such cases.

This outline may be of use to any type of vocational training specialist, politicians and researchers involved in the vocational training field, teachers in tertiary education, instructors and teachers at vocational training colleges, representatives of chambers of trade, trade unions and trade associations and anyone else involved in the field who is regularly or occasionally required to explain the specifics of our vocational training system either to foreign visitors to Germany or on trips abroad.

The following publication is to a certain extent work in progress and is not a finished, printable product. It is a living, developing compendium of professional vocational and further training in Germany. It will need to be updated regularly, and the English used and subject matter presented in it will need to be developed further and improved. On-the-ground experience at home and abroad will give rise to suggestions and improvements, particularly in terms of the English (and American) language used, and we would like to receive such feedback. Please send your suggestions for modifications and enhancements to the following address: strohmaier@bibb.de. The latest templates for copying can be downloaded at: http://www.bibb.de/de/4798.htm

This material evolved from my teaching activities and work with students, from previous publications and from range of materials from the Federal Institute for Vocational Training, the Federal Ministry of Education and Research, the Carl-Duisberg Gesellschaft (CDG), the Gesellschaft für technische Zusammenarbeit (GTZ) and others, to whom I owe a great debt of thanks. It was standing on their shoulders that I was able to develop this outline.

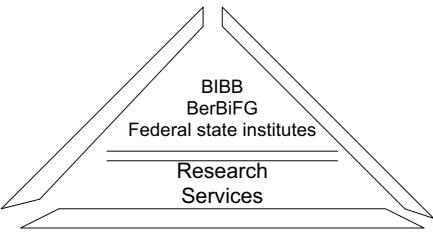
My wish is for this work to be carried on and improved further – for other authors to stand on my shoulders in future, as it were.

Bonn, September 2002

(Prof. Dr. Helmut Pütz)

Federal Institute for Vocational Training, Bonn

education/vocational training	\longleftrightarrow	learning at work
training training places	\longleftrightarrow	continuing training ("upper classes of the DS")
young people/ adults	\longleftrightarrow	problem groups disadvantaged/gifted
tradition "occupational concept"	\longleftrightarrow	innovation modules
company training regulations	\longleftrightarrow	school, vocational school, specialized vocational school (skeleton curriculum)
trainer		teacher
big companies (industry)	\longleftrightarrow	small companies/ local training initiatives (craft, partly commerce)
commercial	\longleftrightarrow	technical, social
employers	\longleftrightarrow	trade unions
Government "consensus"	\longleftrightarrow	trade and industry "differentiation"
federal government	←→	16 federal state govern- ments regional aspects
national BBiG	\longleftrightarrow	international EU, globalisation

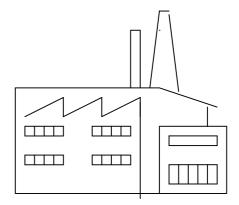


Federal Institute for Vocational Training BBB Researching Advising Shaping the future

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Makrosystems of vocational education

Company model

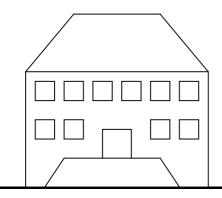


Cooperative model I

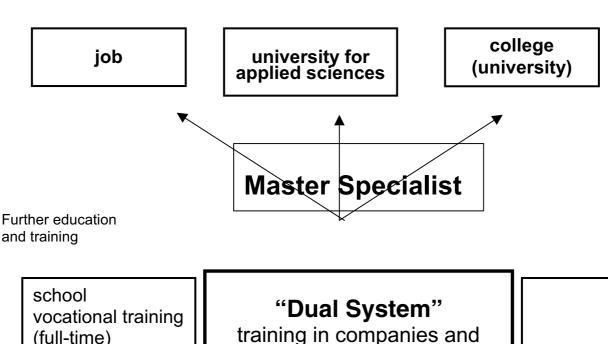
training company and vocational school

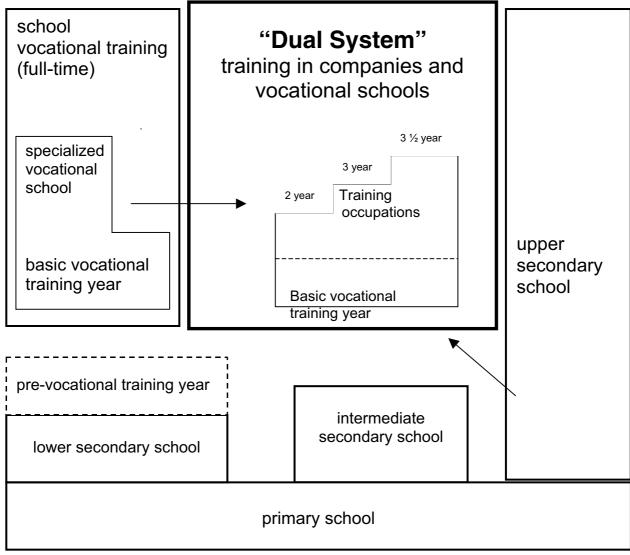
Cooperative model II

training center and vocational school



School model





Germany's Dual System of Vocational Education

What does the 3-year training mean for:

The individual

- → the transition from school to work is facilitated by the 2 to 3-year period of training
- working and learning are combined
- investigation of opportunities and own abilities
- → attainment of social standing and income

the company

- competent workforce for the future
- → low personnel recruitment costs
- low labour costs

the government

- → uniform national qualifications standards are guaranteed
- → maintenance of Germany's competitiveness
- → lower training costs for the government
- → social stability social dialogue

Germany's Dual System of Vocational Education

Infrastructure (1)

Training in trade and industry

- → industry, trade, crafts & trades, agriculture, professional occupations, public administration, health services
- approx. 500.000 companies, hospitals, farms, lawyers' firms etc.
- approx. 900 intercompany training centres with 100.000 training places
- → a stock of approx. 1 million qualified trainers

Partner of the industry vocational schools

- → approx. 2.000 vocational schools
- → approx. 130.000 teachers

The chambers: administrative infrastructure

Approx. 480 chambers have the task of:

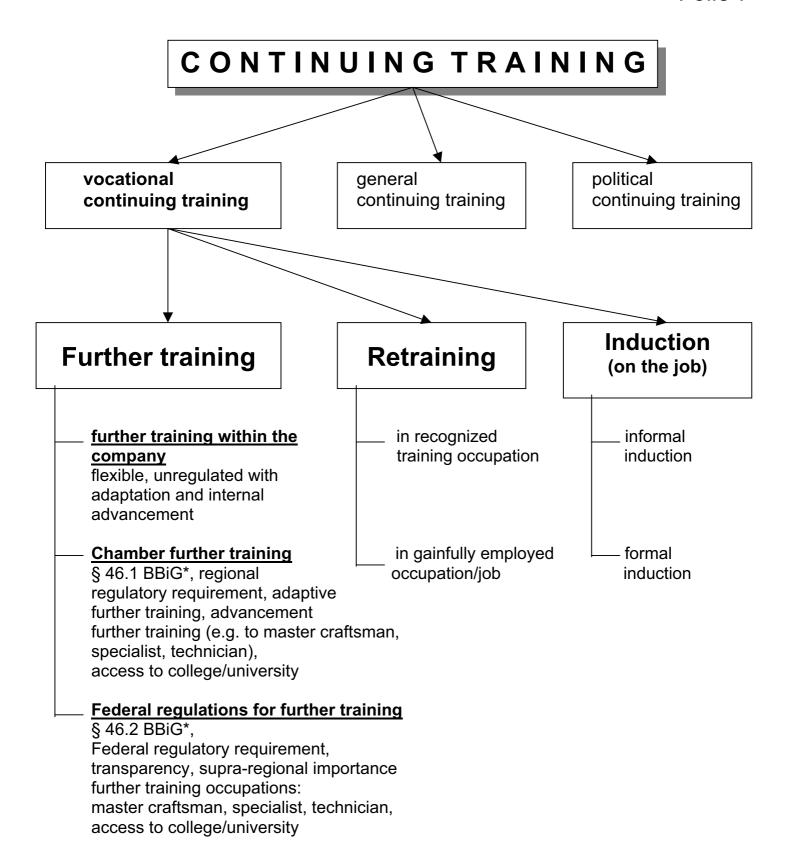
- advising companies
- → registering trainees (1.7 Million)
- certifying the technical aptitude of trainers
- → holding examinations
- conducting social dialogue at regional level

Germany's Dual System of Vocational Education

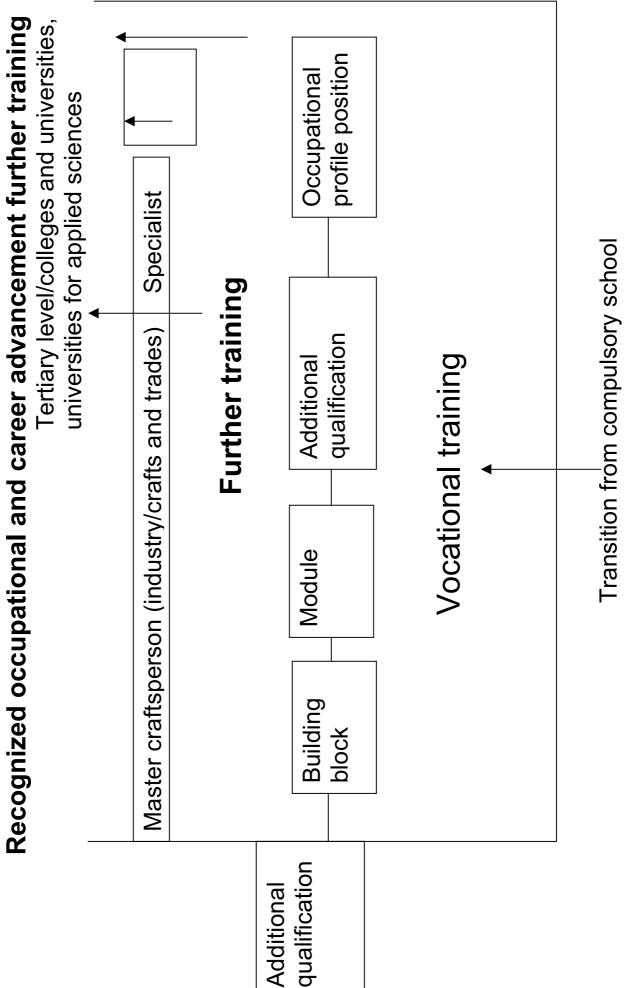
Infrastructure (2)

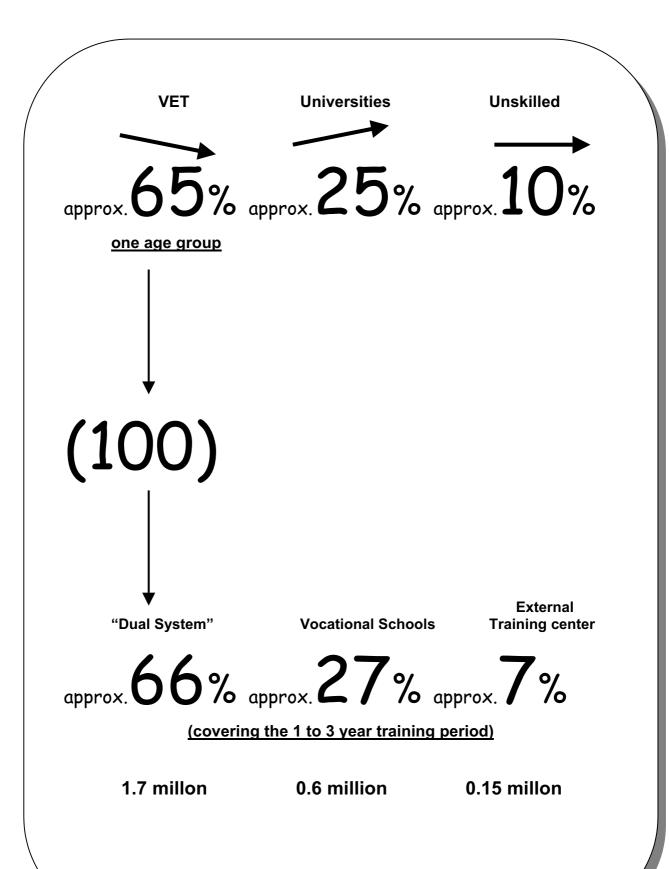
Partnership between employers and trade unions

- → Regional level
 - Vocational training committees of the cambers
 - Examination boards of the cambers
 - approx. 300 000 voluntary members: senior executives from trade and industry, trade union representatives, trainers
- → Federal state (Land) level
 - Vocational training committee within the responsible ministry
- → Federal level
 - Main committee board within the Federal Institute for Vocational training



^{*} Berufsbildungsgesetz (1969): Vocational Training Act





Organizational forms of Vocational training in Germany

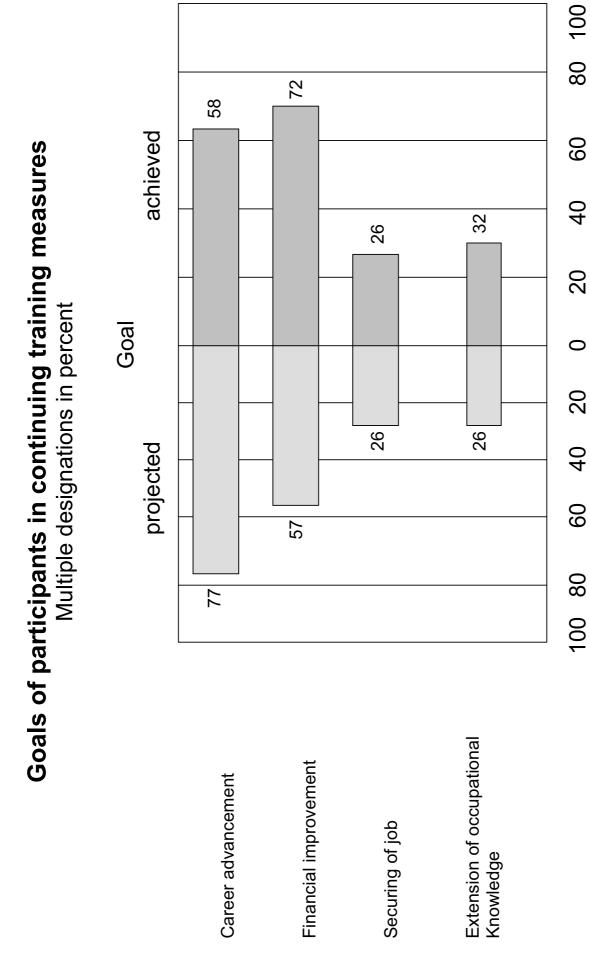
3 Organizational forms:	Dual System (various locations) 3-years as a rule	cations) s a rule	School (sometimes with work placements) 2 or 3 years	External training centers 3 years	al nters S
raining sites:	Company part workplace voca - in-house scho training workshop - intercompany training	part-time vocational school nop training	specialized vocational schools full-time health service	external training centre (practical vocational training)	part-time vocational school g)
Endoral Instituto	~ 3 days 66 %	~ 2 days %	~ 5 days 27 %	~ 3 days 7 %	~ 2 days %

The learning sites of vocational education and continuing training "Dual"? → "Plural"!

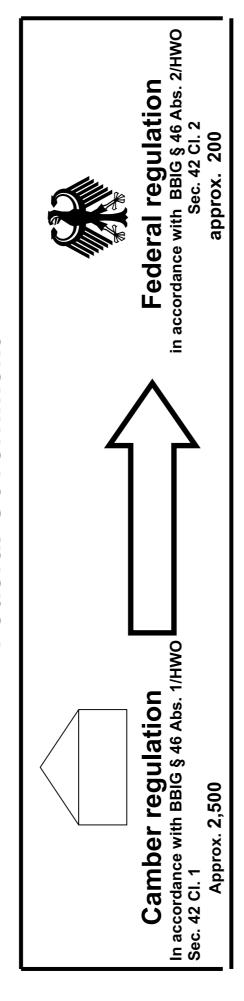
- Company, e.g. crafts & trades, building site, Customer order
- Training workshop, big companies
- Vocational school, part-time vocational school
- (full-time) vocational school, specialized vocational school (BFS)
- external training centre
- intercompany training centre (ÜBS)
- external continuing training seminar/private body
- interactive, multi-media Computer Based learning/training (CBL/CBT), virtual training centre

Forms of cooperation between the two training sites

company (B) / vocational school (S) + the teachers B+S transferable? Siemens teachers? SMEs? **IGB** GDR centres, intercompany training other training sites = full-time workshops, external training vocational schools, training centres, Computer Based Training (CBT) primarily F / It \mathbf{m} work placement (in addition)



Transfer of regulations governing further Training by **Chambers into statutory rules and other of the** Federal Government



Prerequisites for the transfer for industry/trade and crafts

(in accordance with agreement KWB* and DGB/DAG** 1996)

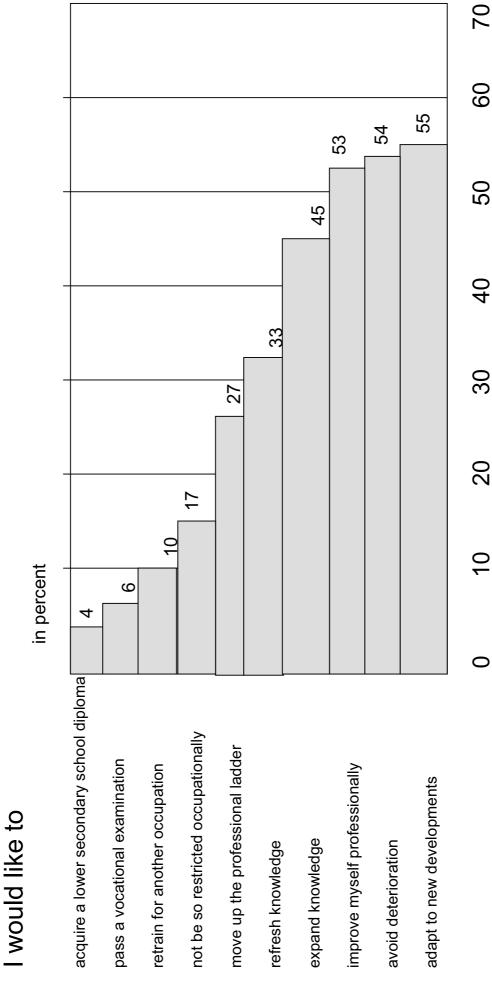
- Chamber regulations have existed for 5 years in at least 5 federal states
 - Over 500 examinees (average) in the last 3 years nation-wide

Exceptions: - statutory requirements

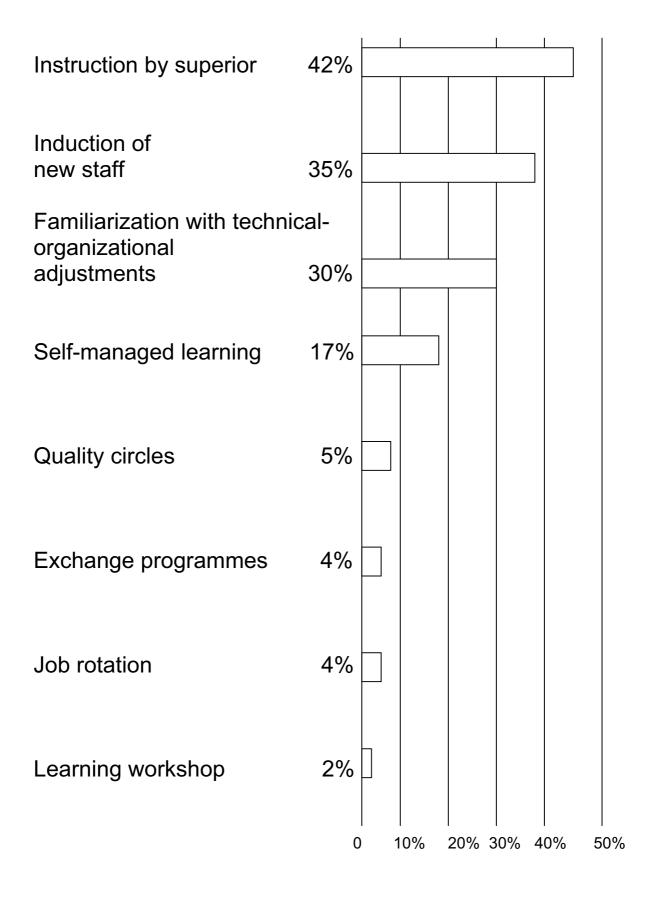
mutual understandig of a regulatory need

* Stakeholders of Economy** Trade Unions

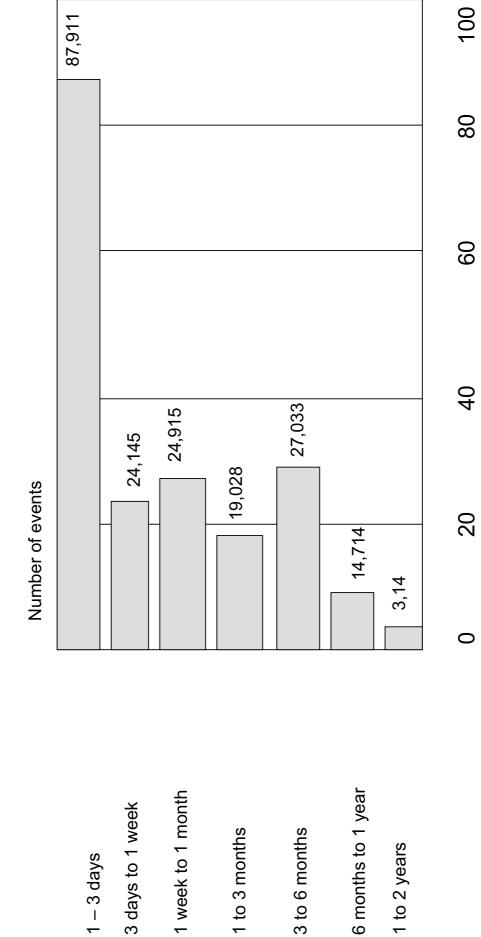
What gainfully employed persons say about continuing training



In-company continuing training



Length of continuing vocational training events



1 – 3 days

Definitions

- Training Regulations (AO)
- Occupational profile/occupational profile Positions/modules
- > General training plan
- > In- company training plan
- > Skeleton curriculum (vocational school)
- > Regulations governing further training

Skeleton Curriculum (vocational school)

>	Fields of Learning (thematic)
>	<u>Learning goals (result)</u>
>	Study contents (technical)
>	Suggested time allocation (hours of instruction)

Legal foundations of vocational Education and Training

- Vocational Training Act, 1969 - BBiG

- Crafts regulation code, 1965 - HwO

(Act for the Regulation of Crafts)

Vocational Training Promotion Act, 1981 - BerBiFG - (Training Places Promotion Act, 1976,

APIFG)

- Social Security Code III, 1997 - SGB III -

- Employment Promotion Act, 1969 - AFG -

- Employees' Representation Act, since 1953 - BetrVG -

- Employment Protection of Young Persons Act,

1976 - JArbSchG

- Basic vocational training year Vocational school year

Accountable ordinance (s), since 1978 - BGJ-AV -

- Ordinance on Trainer Aptitude, since 1972 - AEVO - (new since 1998)

- Coordinantion Training Regulations/skeleton curriculum:

- "Joint results protocol" of 30.5.72 (Federal Gazette No. 216 v. 16.11.1972)

Federal govt. and Länder working in combination in vocational training

BerBiFG! BBiG

Vocational Training §§ 54-59

Promotion Act Vocational Training Act

BerBiFG of 1981:

Vocational Training Promotion through Planning and Research Act BIBB Establishment Act

- Sec. 8 Main Board Tasks
 16 delegates from the federal state (governments) at the suggestion of the Bundesrat (Cl. 3,4,5,8 and 9)
- Sec. 9: Federal States Committee
 - Cl. 1: tasks
 - Cl. 2: composition
 - Cl. 3: opinions on training regulations
 - CI. 4: other procedures
 - Cl. 5: discretionary Federal govt.
- Sec. 11: specialized committees teachers
- Sec. 14: budget
- Sec. 15: charter

Cooperation between the Federal Government and Federal states on vocational training

BBiG v. 1969, HwO v. 1965

- Sec. 54: Federal state committees

+ formation, composition

+ rules and regulations

+ voting

- Sec. 55: Tasks

+ advising the federal state government

+ uniform voc. training → cooperation further development of schools

 Sec. 56: Vocational training committee of the responsible agency/ chambers

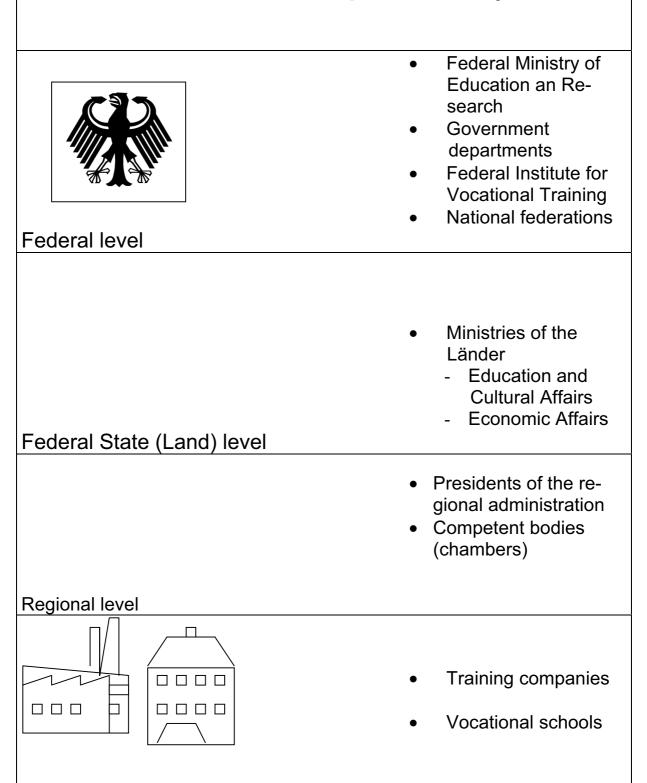
+ formation, composition, appointing the members compensation, recall, deputy, chair

- Sec. 57: Quorum, voting

- Sec. 58: <u>Tasks:</u> information, hearings, legal regulations

- Sec. 59: Rules and regulations

Levels of responsibility



Company level

Basic elements of the dual system of vocational/educational training

In-company training

School training

Traineeship contract

legal basis for the training relationship

Compulsory
Vocational education

Training regulations

legal
basis
for training
occupations for
which formal vocationaltraining exists

Curricula

vocational Training Act

legal basis for training

Educational acts of the federal states

Trainer

Training personnel

Vocational school teacher

Chambers or other responsible agencies

advice and monitoring

Presidents of the regional administrations or boards of education

Firms providing training

financing

Federal states, Administration = Districts and municipalities

Structural elements of the Skeleton curricula of the KMK (Board of 16 Ministers of Education

fields of learning

study contents

learning goals

suggested time allocation

Instruction at vocational schools: 1/3general / 2/3 specialized instruction

social studies German foreign language sports/religion technology economic fields of learning

VOCATIONAL SCHOOL IS A PARTNER IN THE DUAL SYSTEM AND AN INDEPEND-ENT TRAINING CENTRE

Part-time vocational schools

Daily instruction and block instruction

- ~ Top priority: maintaining educational principles
- Full-time vocational schools
 - ~ prepare for an occupation: goal is to make participant fit to pursue an occupation, not to simply "mark time"
 - lead to qualification in an occupation: principle of subsidiarity and alternative to Dual System (Dual System not at hand or not suitable)

VOCATIONAL SCHOOL AS PARTNER REQUIREMENTS HAVE INCREASED

- Pupils' previous eduction/training
- Heterogeneity of in-company training technical, economic, social competences
- Varying lengths of training
- Differentiation of contents, learning objectives and methods

Vocational schools have to reconcile all differences, companies only those they select themselves

VOCATIONAL SCHOOL AS PARTNER

CONTENTS OF INSTRUCTION - DEFINED STAN-DARDS OF THE FEDERAL GOVT. AND AUTONOMY OF THE FEDERAL STATES

- Defined subject standards of the training regulations
- Educational task of the vocational school:
 Personality development, subject competence
- End of the industrial/commercial division?
 Example: IT occupations
- End of training/continuing training divison?
- Future of teacher training

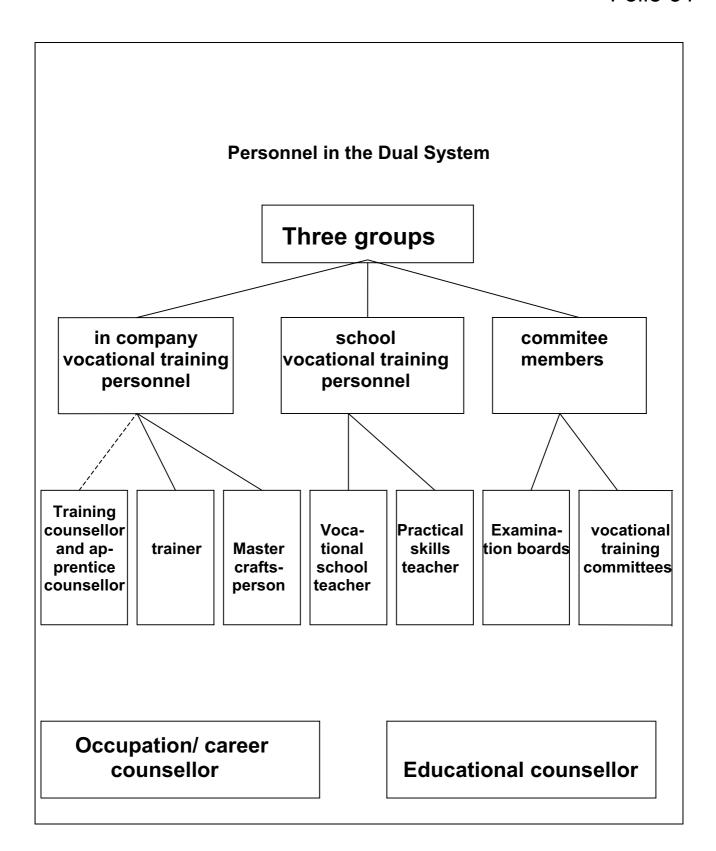
VOCATIONAL SCHOOL AS AN INDEPENDENT TRAINING CENTRE LEADING TO A RECOGNISED QUALIFICATION FULL-TIME SCHOOLS WILL INCREASE

Reasons

- Manual work is on the decrease; theoretically-based practice is on the increase; the importance of language and mathematics is growing; systematic knowlegde logical abstract thingking are demanded in all occupations
- Lack of training places in Dual System or alternative model?

LEARNING SITE COOPERATION ~ AN UNSOLVED PROBLEM

- Results of BIBB studies
- Dialogue blockade: who can speak to whom?
- Learning site dialogue as a precursor to learning site cooperation
- Joint platform and organization
- How will central training workshops/external and intercompanie training centres/specialized vocational schools be included?



Trainers and vocational school teachers

Practical instruction	Theoretical instruction	Age
Head of training Advancement opportunities - as main occupation - as secondary occupation	High school principal Advancement opportunities	28
trainer craftsperson, specialist master certificate craftspersons's qualifying examination	Secondary school teacher VOCATIONAL SCHOOL TEACHER second state examination preparatory service	24
Company practice Theoretical courses e.g. journeyman skilled worker	First state examination Academic studies Subject-specific practical training	18
Vocational education (Dual System)		
	University entrance level of education	
Lower secondary school	Secondary school levels I + II	10
Elementary school	Elementary school	6

Technology model

Human ressources model

- Capital assets
- > Technological progress
- > Hierarchy
- Clockwork mechanism
- > Lack of training
- The employee is a small wheel in a process determined by others

- Human resources include all staff members of a company
- Organizational developments
- > Teams
- Consideration of the individual in the overall constellation, identification with the company, corporate culture
- > Training for all employees
- The individual employee has a clearly defined positive role

An example: the motor vehicle industry

B.J. after Japan
A.J.

Work organization

assembly/production line mass production

flexible,computer-controlled just-in-time- and lean production; small and large Series also; Assembly/production line

Personnel

Hierarchical organization

organization in teams

- engineer: supervision planning
- skilled worker: logistics
- unskilled workers:

assembly/production

line

management, engineers, technicians and skilled workers work together in teams/groups every team member must be able to plan, carry out and monitor his/her work in this process independently

25000 gainful occupations

approx. 350
training
occupations for
which formal
vocational
training exists

The approx. 350 state-recognized occupations are the basis for a structured and uniform vocational education to skilled worker/employee level. They open the door to a variety of occupational activities and to further training. There are approx. 25,000 gainful occupations.

Federal Law Gazette

Training regulations
Basis of in-company training

Recognized occupational titel

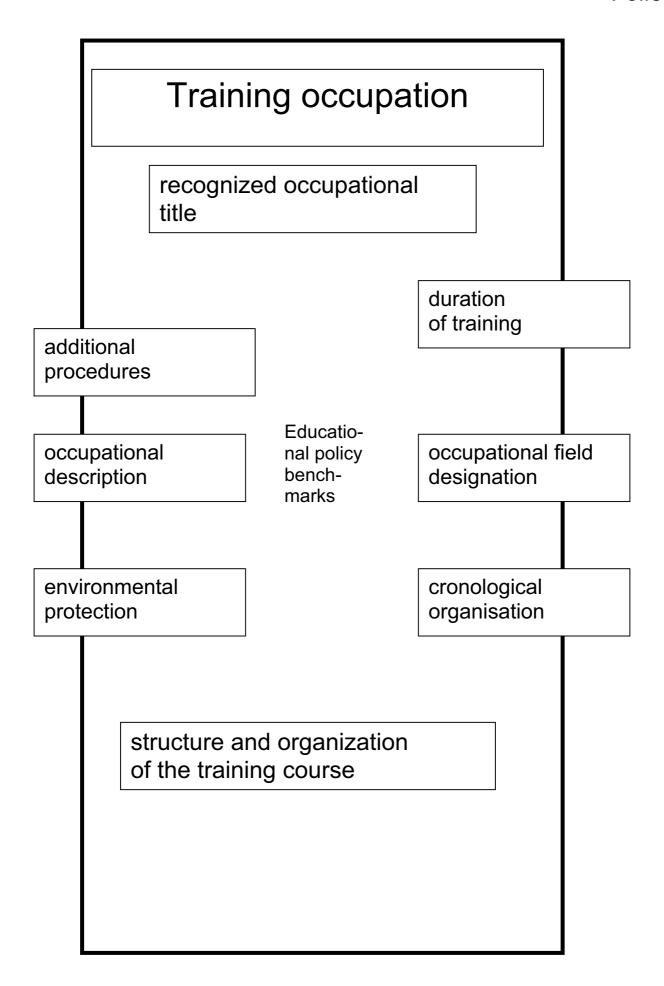
Duration of training

Recognized occupational profile

General training plan

Examination requirements

Regulations pursuant to Sec. 25 BBiG/HwO



Phased training in the construction industrie

12 months	Brick layer Concretor Heating and chimney technician	Joiner/carpenter Stuccoist Tile and mosaic layer Floor layer	Insulation technology specialist Dry construction builder	Road builder Pipeline fitter Canal construction worker	Well builder Special underground construction worker Rail track builder
12 months	Skilled structural engineering worker		Skilled finishing	worker	Skilled civil Engineering worker
12 months		Common	knowledge and skills		
	12 months	12 months Skilled structural engineering worker	Skilled structural engineering worker	Skilled structural engineering worker dge Skilled finishing	Skilled structural engineering worker Skilled finishing worker

Training occupations according to school leaving qualifications

12,278	12,311	10,731	1,756
10,541	9,896	10,569	1,576
6,574	8,506	9,946	992
4,547	8,378	9,721	758
Bank clerk	Retail clerk	Car mechanic	Painter and varnisher Disabled occupations in crafts and trades Disabled occupations in domestic sciences Bricklayer
Industrial clerk	Medical assistant	Painter and varnisher	
Wholesale and retail clerk	Car mechanic	Retail clerk	
Office clerk	Office clerk	Hairdresser	
University entrance level of education	Intermediate secondary school leaving certificate	Lower secondary school leaving certificate	No lower secondary school leaving certificate

Training Regulations and skeleton curricula

Training Regulations Decree and promulgation

Skeleton Curricula

Fed Gov

Hearing of the central organizations

Resolution in Federal States
Coordinating committee
Resolution in BIBB standing committee
Resolution in BIBB federal states
committee

16 Ministers of Education

Federal states

1

Coordination of the drafts training regulations and skeleton curriculum

Joint session BMBF, BIBB, KMK, central organizations, experts

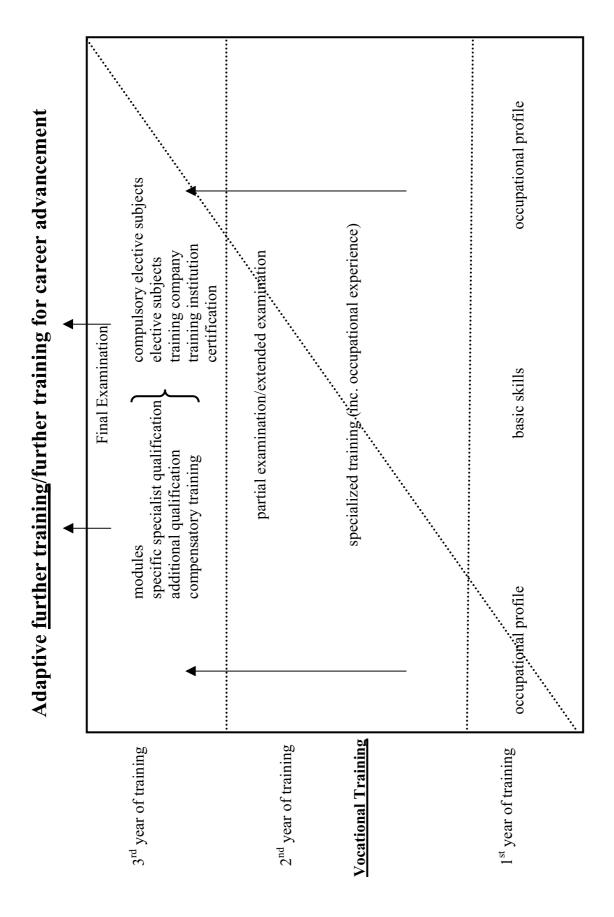
Development of a draft skeleton curriculum Federal states experts

Development of a draft training regulation
Federal government/BIBB experts



Project resolution in Federal/States

coordinating committee
Application discussion
Laying down of educational
policy benchmarks



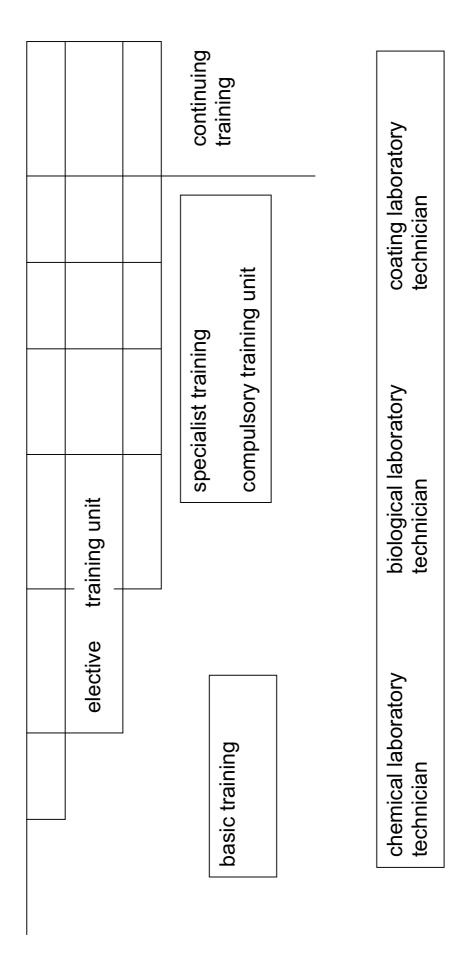
Structural concept "IT occupations" Basic skills - specific occupational skills

Flexibility	through elective deployment areas/ specialist areas within the framework of the specialist qualification	
Specific occupational skills	 Information and Communications Systems electronics technician Skilled computer technician Information and Communications Systems clerk 	 Computer cierk
Basic skills	all four occupations in the group	

Structural concept for the media industry – combination of compulsory and optional modules

training units to be chosen by trainer/instructor or trainee	 2 training units (common selection list) 2 training units from selection list I 1 training unit from subject-related subject-related subject-related selection list II
subject-specific training units	 media consulting media design media operating media technology
common training units	media designer for digital and print media

Structural concept for laboratory occupations -Linking up of initial and continuing training



Goals of modularisation

Training continuing training

initial and continuing training

Educational quotas distributed among

Working life

- > Improving links between vocational and general education
- links between different learning sites
- Integration of target groups not located close to education and postqualification
- ➤ Individual learning needs → qualification requirements of the companies
- facilitating learning process flexible work organization/ O-Development
- facilitating "open learning" self-management of learning processes
- step-by-step acquisition of certificates and qualifications: "credits"
- improved comparability between national qualification systems = EU, vocational training portfolio
- testing of new economic financing models
- > promotion of disadvantaged and gifted at all educational levels
- "additional qualification(s)", also compensatory

Definition

Module = Bundle of self-contained initial and continuing
Training contents
Which leads to useful, more complex partial qualifications
(can be accumulated to achieve <u>full</u> occupational competence) and are certifiable/(state) recognized

Dual-/modular training

Petrol Station attendant (3 years)

general knowledge of the occupational branch

commercial activities

customer and travel service

damage elimination

fuel and accessories sale

knowledge of motor vehicles and accessories

accident and fire safety regulations

petrol station and garage operation

basic knowledge of procucts

car and motorcycle care

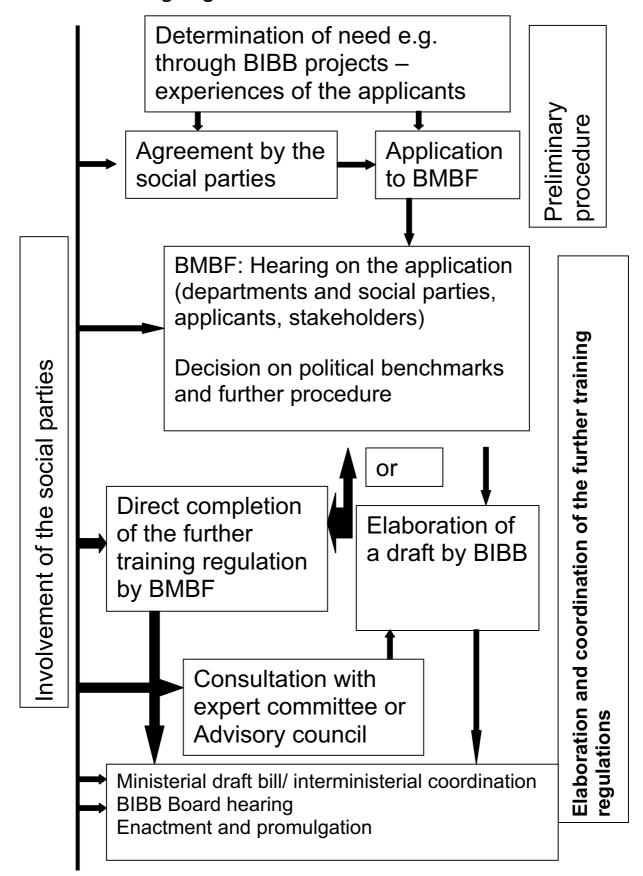
motor vehicle
attendant
(ap. 3 months)
brakes
tires
body
cooling system
oil change
ignition system
battery

training module/ partial qualification (approx. x days)

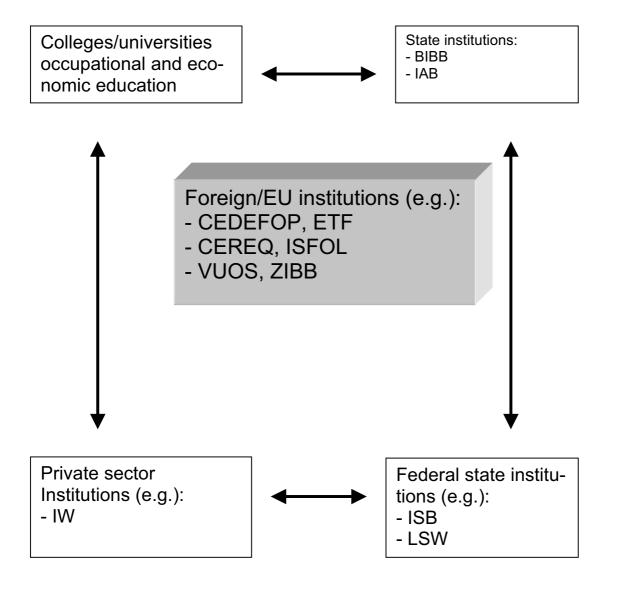
battery



Procedure for the elaboration of further training regulations in accordance with BBiG/HwO



The players in vocational training Research and occupational research



Vocational training practice

Main Board of BIBB

Federal government 5 Representatives 16 Votes

employers 16 representatives/16 votes

Consultative body of the Federal Government

- Vocational training report
- Fundamental questions of vocational training

Decision-making body of the institute Charter - budget - reserarch programme trade unions 16 representatives/votes

Federal states
16 Representatives
16 Votes

Consultative:

1 representative of the federal labour office 1 representative of the federal association of municipalities

							BIBB	Bundesinstitut für Berufsbildung 53043 Bonn © 228-107-0 © 0228-107-2977 ⊠ zentrale@bibb.de	Address: Friedrich-Ebert-Allee 38	
	0	ions		Central Services	Z 1 Personnel, in-house initial and continuing vocational education and training	Z 2 Budgeting, Finance	$\frac{Z}{2}$ Legal affairs, Legal issues relating to vocational education and training. Organization	Z4 Internal services, Building management		
Office of the Board	Management Office	Press, Public Relations	Audit Office	Dept. 4 Structure and Regulation of Vocational Education and Training	Section 4.1: Commercial service occupations and occupations in the media business, Occupations in initial and continuing vocational education and training (A.WE.B)	Section 4.2: Industrial production occupations, Crafts	Section 4.3: Company-related service occupations, Structures of continuing vocational education and training	Section 4.4: Personal and social service occupations, Committee for problems of disabled	persons	Section 4.5: Quality standards, Certifications, Examinations, Editing of ordinances
Describer	Secretary General	Permanent Representative of the President	Deputy Secretary General, Head of Research	Dept. 3 Teaching and Learning Formats in Vocational Education and Training	Section 3.1: Education and training pathways, Competence development, Learning trajectories	Section 3.2: Training technology, Training personnel, Learner-trainer cooperation	Section 3.3: Pilot projects, Innovation and transfer	Section 3.4: Distance learning, Open learning		
				Dept. 2 Sociological and Economic Principles of Vocational Education and Training	Section 2.1: Needs analyses, Training supply and demand	Section 2.2: Early warning systems, New fields of employment, Vocational education and training statistics	Section 2.3: Costs, Benefits, Financing	Section 2.4: Training behaviour, Career paths, Target group analyses	Section 2.5: Learning venues. Promotion of central	training facilities
"Education for Europe" National Agency	iMOVE International Vocational	Training and Education Marketing Division	Communication and Information Centre for Professional Training - KIBB	Dept. 1 Research and Service Concept Development, International Vocational Training and Education Education Marketing	Section 1.1: Research and service planning, Vocational Education and Training Report, Task Force	Section 1.2: Product marketing, Dissemination of specialist information, Information systems Publications Information technology:	Project management "Innovations in Vocational Education and Training and Continuing Vocational Education and Training" (PTIAW):	Section 1.3: International cooperation in vocational education and training, Education marketing		As of: 1 October 2002

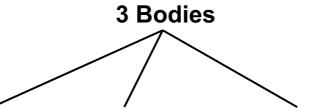
Legal form of the Federal Institute of Vocational Training (BIBB)

Sec. 6 Cl. 1 of Vocational Training Promotion Act (BerBiFG):

"A Federal Institute for Vocational Training with legal capacity directly responsible to the Federal Government shall be established."

"...within the framework of the educational policy of the Federal government."

BIBB bodies and their tasks



Main Committée/Standing Committee

- right of decision-making powers
- research programme
- budget
- charter
- statutory provisions and orders advising and supporting the Federal government on basic questions of vocational training

Secretary General/ President

implementation of tasks BIBB

- administration
- external representation of BIBB
- advice and support for the federal government

Task Catalog in accordance with BerBiFG

1. Instruction-bound tasks (sec. 6 Cl. 2 Nr. 1 BerBiFG)

- Training regulations, other statutory rules in accordance with BBiG/HwO
- Vocational training report
- Vocational training statistics
 - Promotion of pilot projects

2. Administrative tasks

Intercompany training centers

(sec. 6 Cl. 2 Nr. 2 BerBiFG)

Directory of recognized training occupations

(sec. 6 Cl. 2 Nr. 4 BerBiFG)

3. Research tasks

(sec. 6 Cl. 2 Nr. 3 BerBiFG) Vocational education/training research

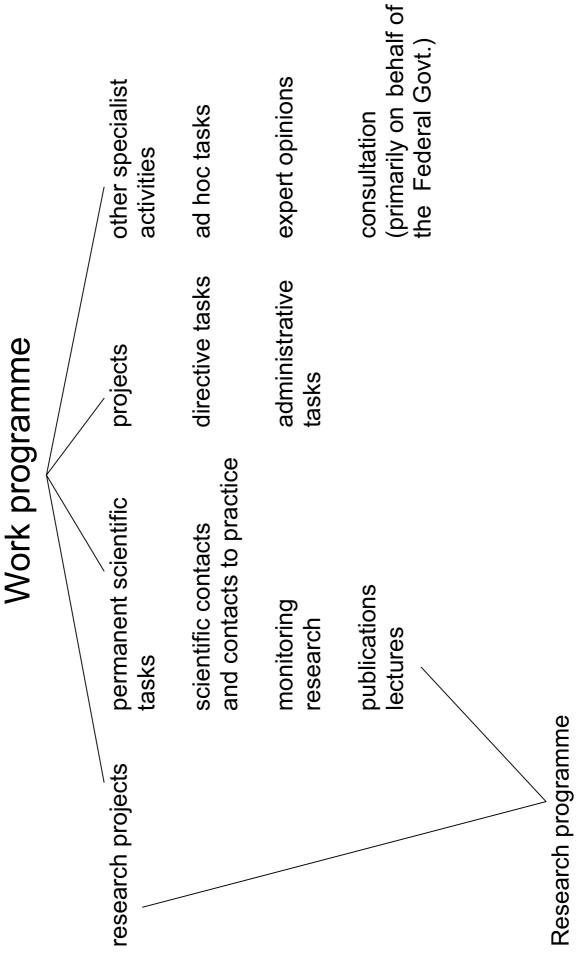
Media research

(sec. 6 Cl. 2 Nr. 5d BerBiFG) Distance learning research

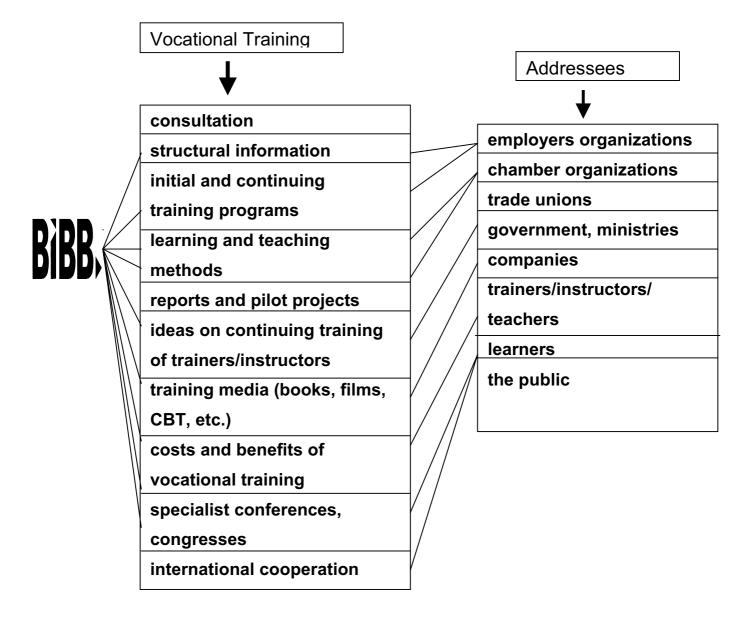
4. Consultative tasks

Advice to distance learning institutions and participants (sec. 6 Cl. 2 Nr. 5e BerBiFG)

5. International cooperation in vocational education/training (sec. 6 Cl. 2 Nr. 1e BerBiFG) (directive task)



Federal Institute for Vocational Training



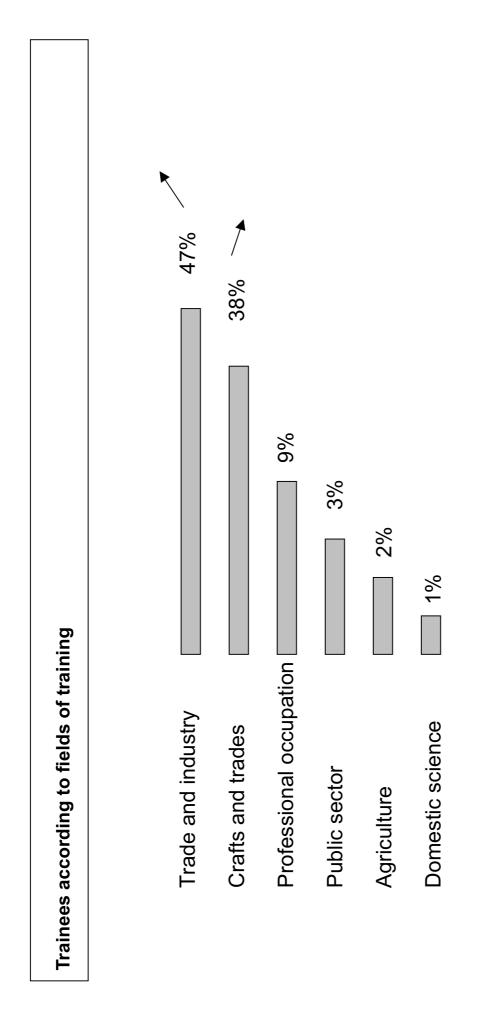
Fundamental principles of the work of BIBB

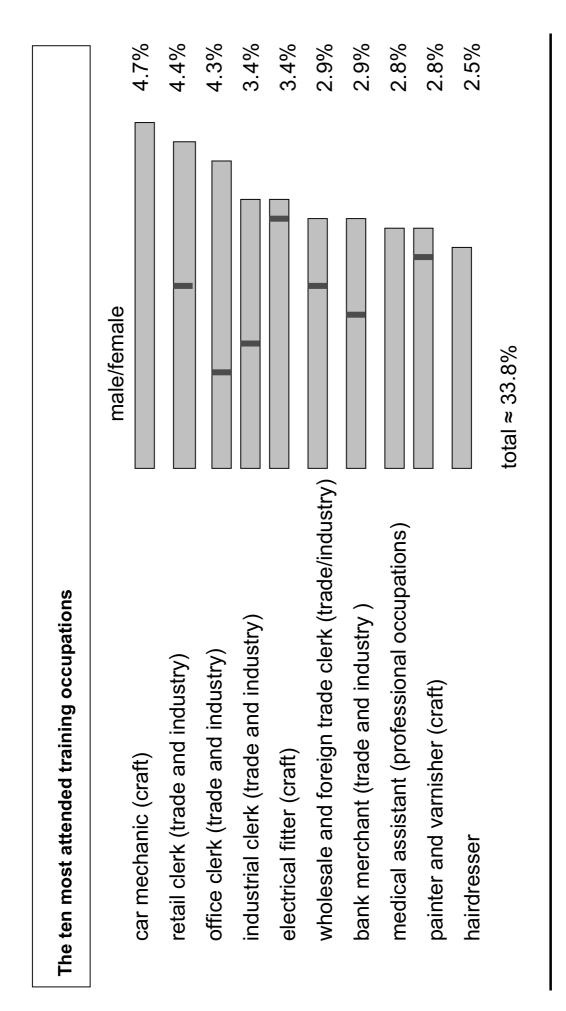
- principle of consensus in regulatory work
- practical orientation (participation of experts from companies)
- integrated task perception (prerequisite: corresponding links between basic research and application-oriented qualification of the staff, work experience)
- connection between pure research and realization-oriented research (principle of effect on the outside world)
- freedom of research in the implementation of projects and the publishing of results

Germany's Dual System of vocational education

Training in Germany: two systems grow together

Old	1989	New
federal states		federal states
500 000	training companies	4 500
1.6 millon	trainees	360 000
3	trainees/company	80
70%	share of small companies	10%
380	occupations for which formal vocational training exists	308
private/state	relationship company: school	state only
3 years	duration of training	2 years
free	access	access (3 stages) via grades
700	interfirm workshops (intercompany train- ing centres)	0
0.5%	boarding schools	35%
0.3%	in-house vocational schools	75%



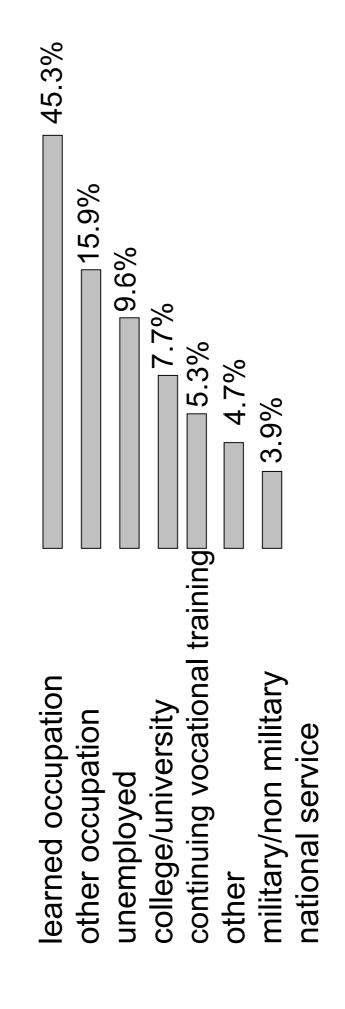


Reasons for providing training companies

Reasons for training	29% of all companies train
Young persons corresponding to company requirements	% 86
Skilled workers not recruitable on the labour market	91%
Avoidance of personnel fluctuations through company bonding	82%
Choice of best trainees when recruiting	%22
Avoidance of personnel mistakes in the hiring of outsiders	74%
Enhanced reputation for the company	%69
Saving on induction costs	23%
Reduction of unskilled and semi-skilled labour	48%

Cost savings in personnel recruitment

Where abouts of those who have completed training in the Dual System in the new federal states



Unemployed young persons under 25 years in EU

Italy	31.5
Greece	29.5
Finland	28.4
Spain	25.5
France	20.6
EU	16.1
Belgium	15.2
Great Britain	12.1
Sweden	9.5
Germany	8.5
Portugal	8.4
Denmark	6.7
Ireland	6.5
Luxembourg	6.4
Austria	6.3
the Netherlands	5.3

Annual average 2000 Original data: Eurostat

Measures to improve the Training places situation (I)

- 1. Will for reform: not a Problem of knowledge but of realization!
- 2. Faster and more "**new occupations**" in particular in the services sector, "specialist occupational groups"
- 3. Restriction of the "**principle of consent**" through setting of deadlines by the Federal gouvernment?
- 4. **Flexibilisation** of the Training Regulations (new IT occupations): modularisation in 3rd year of training, dovetailing of initial and continuing training/compulsory and optional modules
- 5. More training in **local training initiatives**, support measures
- Reform and expansion of part-time vocational schools
- 7. Training site cooperation
- 8. More differentiation and individualization:
 - Promotion of disadvantaged youth = compensatory, "simple" occupations
 - Promotion of gifted young people = additional qualifications
- 9. Develop and expand the "upper classes of the Dual-System".

Measures to improve the Training places situation(II)

- 10. Specific training and continuing training in **independence**/business start-ups
- 11. Inclusion of specialized schools (BFS)as another Dual System
- 12. New financing aids:
 - Additional tax relief for (socially responsible) training provision
 - "Freezing" of training allowances/"apprentice wages"?
 - ➤ Fund-levy financing?
- 13. Reform of the examination system (for chambers), Vocational schools + companies, "credits", "elongated examinations" Examinations: project/team work, customers orders
- 14. Practical equivalence/parity of general education/university & college entrance, universities for applied sciences

Costs

- 1. The firms bear the costs for their training measures themselves and pay a levy for the services of the chambers (administration, intercompany training centres, examinations etc.)
- 2. The training costs differ every year for each trainee, depending on
 - ratio of systematic training to training in the workplace
 - ➤ Training personnel (part-time or full-time trainers)
 - > Training allowance
- 3. The government provides financial backing for special training measures, e.g. through
 - Integration programs, e.g. underachievers, minorities
 - Innovative experiments, e.g. new methods, new contents
 - ➤ Programs for small and medium sized enterprises (SMEs), e.g. intercompany training centres for systematic training and imlementation of state-of-the-art technology/skills/technology centers
- 4. The federal state governments bear the costs of the vocational school instruction, the municipalities for the school buildings

Financing of vocational education/ per year (Euro)

Total € 25.9 billion vocational schools € 5.62 billion training € 2.9 billon 11% vocational school (part-time) € 2.8 billon 11% vocational school companies € 20.3 billion 78% Dual System € 23.0 billion

Discretionary costs (avoided)

➤ Recruitment costs (advertisements, interviews

	rtooralamont oooto (davordoomonto, mitorviotro,
	administration, induction, continuing training)
>	Lower risk = miscasting
>	Bonding to company, corporate culture, group strengthening

➤ "human capital awareness", image factor

In-company training: what a training place costs

Gross costs

production output by trainee 7.249 1997 in Euro per trainee 17.919 other costs 1.366

Industry	Craf	Craft & trades
Personnel costs of the trainee	10.086	7.680
+ costs of the training- personnel	7.386	209.9
+ fixed asset and	661	351
+ other costs	1.523	1.174
= gross costs	19.656	15.812
- productions output of the trainee	6.954	7.606

net costs

personnel costs of

8.999

the trainiee

10.670

costs of training

7.034

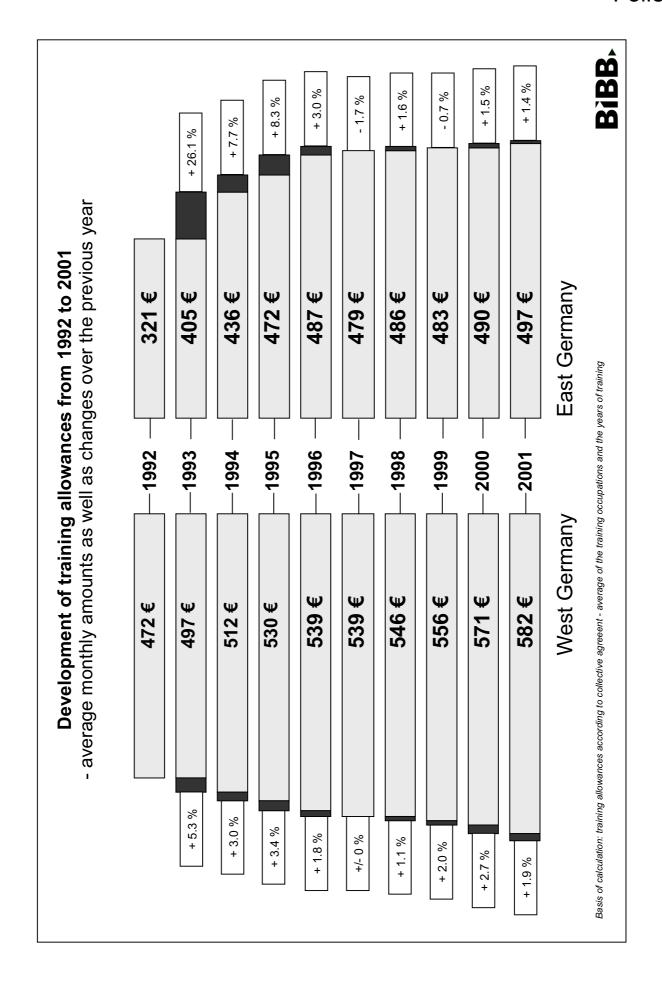
personnel

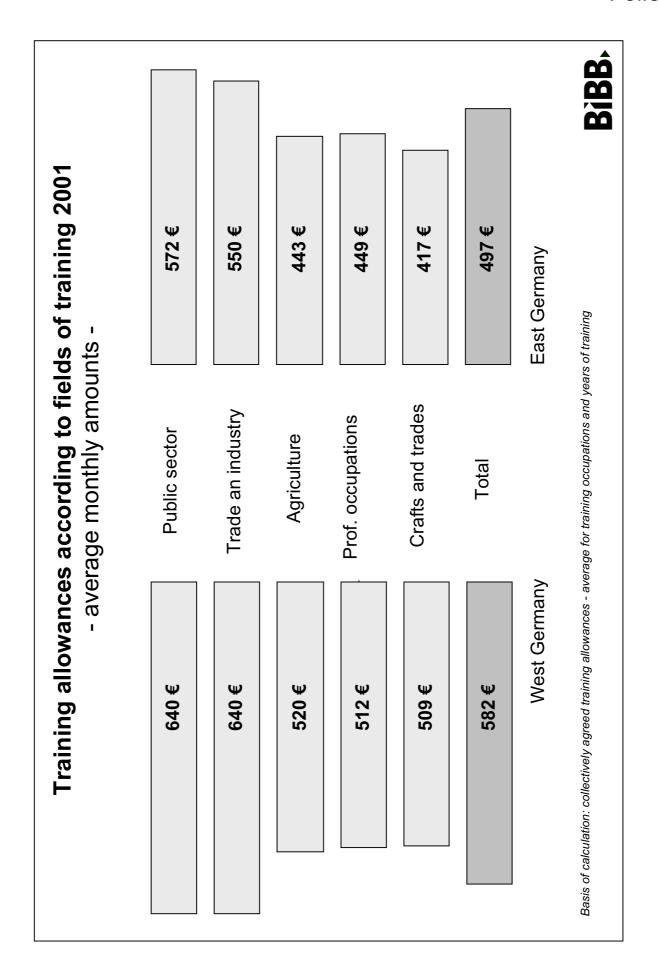
fixed asset and material costs = net costs

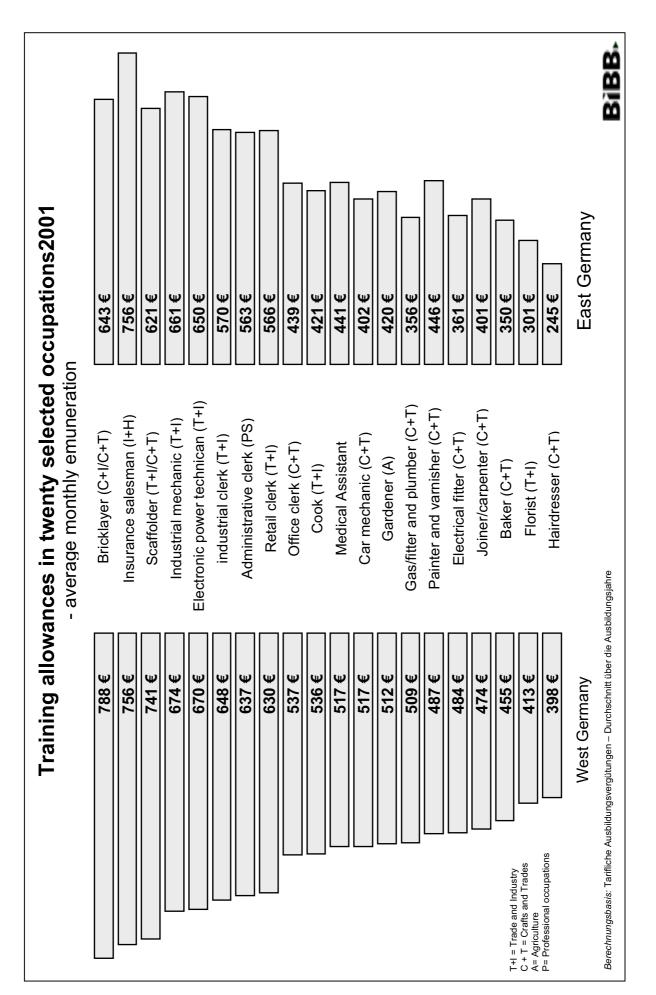
12.702

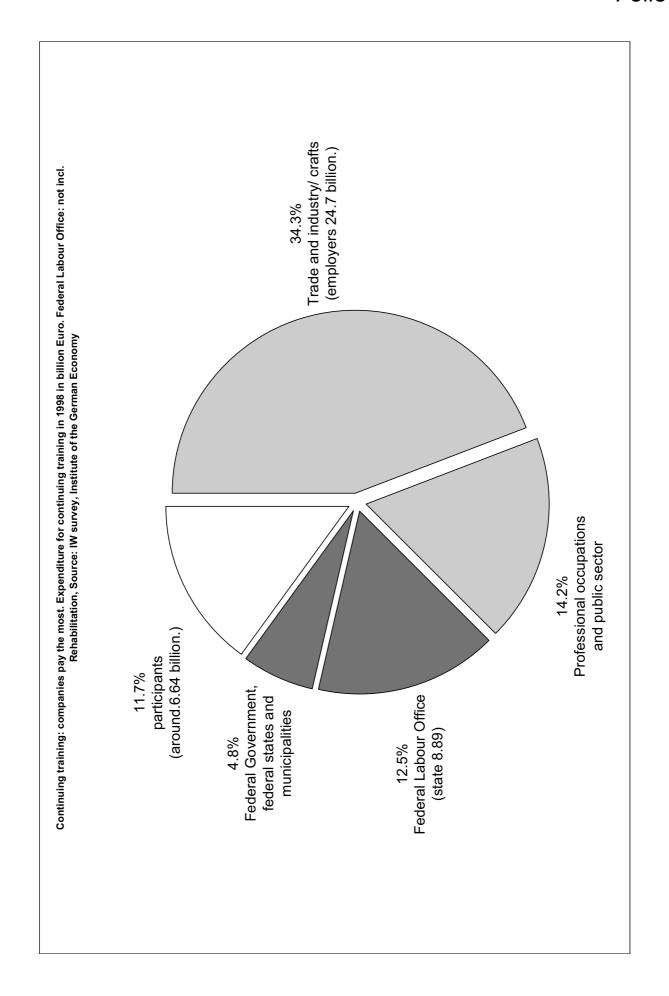
8.206

All sectors of the economy









PROMOTING VOCATIONAL TRAINING FOR DISADVANTAGED YOUNG PEOPLE (I)

Young People who require special Support

The problem/the magnitude

In Germany total without vocational qualification (per year and age group around. 13% around 100 000)

1. The problem:

- vocational certification, preferably in state-recognized training occupations
- reduction of the number of young people without vocational qualifications
 - * through new and differentiated paths, in order to achieve this goal
- restrictions by state SGB III financing (Social security code III)

2. The main question:

- special vocational courses (also for disadvantaged youth) within the framework of the BBiG/HwO? (Vocational training act)
- modularisation of training courses (curricular didactic internal differentiation),
 perhaps also partial qualifications?

PROMOTING VOCATIONAL TRAINING FOR DISADVANTAGED YOUNG PEOPLE (II)

Principles

- full skilled worker/journeymann/skilled employee qualifications
- state-recognized qualification in accordance with Training Regulations (AO)
- support measures/priority
- educational needs of disadvantaged youth and requirements of the labour market
- agreement of social parties, Federal Government, federal state governments
- stabilization, modernization, further development of the vocational training system

PROMOTING VOCATIONAL TRAINING FOR DISADVANTAGED YOUNG PEOPLE (III)

Findings:

- At present, varying demand in industry for specific training occupations is recognisable
- But: from individual, sectors, companies, vocational training experts
- New generation of specialists in the future

Paths:

- Flexible, differentiated, individualized, phased
- rather a lengthening than a shortening of the period of training
- Support measures
 - socio-educational
 - school
 - training-attendant aid

PROMOTING VOCATIONAL TRAINING FOR DISADVANTAGED YOUNG PEOPLE (IV)

Emergency solution for the stigmatization of the "unskilled"

- without vocational qualifications subject to discrimination on the labour market
- integration/reintegration into working life through
 - modularized training courses
 - reduced learning-content training
 - less theory in examination
- new training occupations with labour market prospects

Varied demands today

- around 350 state-recognized training occupations in Germany
- varied profile and requirement hierarchies
- two and three-year training occupations
- full social welfare protection in two-year training occupations through parties to a collective wage agreement (BSozGer - Federal Social Court)
- example: new: two-year now three-year occupations: scaffolder
- example: retailer/ upgraded retailer (Verkäufer, KiE)

PROMOTING VOCATIONAL TRAINING FOR DISADVANTAGED YOUNG PEOPLE (V)

Legal framework

BBiG/HwO (Vocational Training Act (Crafts and Trades Regulation Code)

- make possible special occupations/state recognized training regulations/"simple" occupational profiles (more easily learned by disadvantaged young people)
- make possible organization of training corses in modules when training leads to state-recognized qualification (differentiation and flexible shaping of the entire training course)

Examinations

- own "disadvantaged section" in BBiG und HwO with special examination regulations
- supplementary oral examinations for grade compensation
- extended processing time for theoretical examination
- forms which make the written examination easier
- recognition of examination sections taken as partial qualification with certificate (resolutions of the "Alliance for Work, Training and Competitiveness", 1999)

PROMOTING VOCATIONAL TRAINING FOR DISADVANTAGED YOUNG PEOPLE (VI)

<u>Programme-controlled compter work materials/computers (BIBB projekt)</u>

- successful pedagogical-didactic means for promotion
- intensification!
- the operation of programme-controlled (computer) tools can be learned
- promotion of motivation for initial and continuing training
- strengthening of feeling of one's own worth, social prestige and recognition among each other
- improvement in skills in language, arithmetic, writing, drawing, information technology
- "Qualifizierungsbausteine"/modules for qualification

Support for gifted apprentices in Vocational training

Support for gifted young people in <u>in-company</u> training

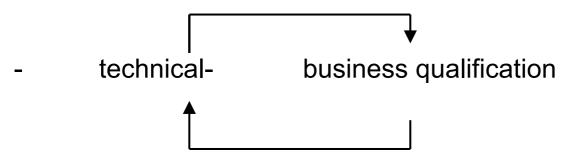
- Occupational advancement paths/also <u>inhouse</u> support/in addition to vocational school/training and work place
- Identify and promote during training
- Federal Ministry for Education and Research support programme (since 1991, 4,500 annually/consolidation/ not just graduates/<u>during</u> in-company training
- In addition to proven measures (e.g. competitions, BBiG reduction) → Using GDR experience: "inventors' schools", "gifted programmes"

Gifted (II)

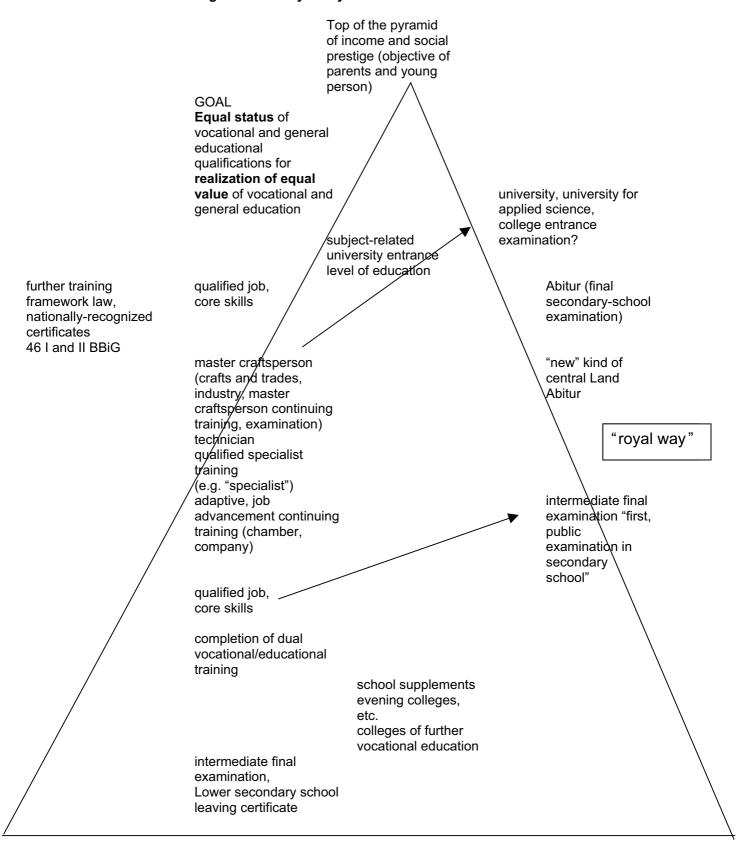
- public "marketing"
 - attractiveness of Dual System
 - in-company selection of central theme
 - such as benefits for gifted pupils in schools and colleges, research
- targeted: girls and young women
- additional tasks/demanding and responsible/projects/clients/ building sites
- in-house preparation for competitions/ release
- special. foreign languages/IT/service (clients)/"Youth researches"
- heavier technical and non-business DLoccupations
- image factor/benefits/SMEs
- freer work design, task processing

Gifted (III)

- "2nd threshold"/permanent job/ adaptive further training
- innovative trainers/more individual advice
- shortening of length/additional qualifications (certified)



open in-company "support sircles" for skilled workers/employees, "creative task pools"/simulations and management games — for apprentices/trainees



secondary modern school, intermediate modern secondary school (junior high school), "standard school", comprehensive school, Gymnasium (high school/junior school)

University/University of applied sciences FH entrance regulations for specialists with vocational certificate and no Abitur (final school-leaving examination)

	(יווימו סטווסט וסמיווו) אינויון) Add	-
	entrance	probationary	direct admission
	examination	admission	
Baden-Württemberg	U/FH		
Bayern	preparation + examination*		
Berlin		FH/U	
Brandenburg	FH/U		
Bremen	FH/U	FH/U	
Hamburg	FH/U		FH/U with consultation
Hessen	FH/U		
Mecklenburg-Vorpommern	FH/U		
Niedersachsen	FH/U	FH/U	FH/U
Nordrhein-Westfahlen	FH/U	FH/U	
Rheinland-Pfalz	U (or probationary admisson)	Ħ	
Saarland	FH/U		consultation interview
Sachsen	FH/U		
Sachsen-Anhalt	FH/U		
Schleswig-Holstein	FH/U	FH/U	
Thüringen	FH/U		

FH = University for applied sciences

U = University