# Present challenges to Vocational Education Training within the Dual System in Baden-Wuerttemberg



#### **Contents**

- 1. General background information about Baden-Wuerttemberg and Germany
- 2. Vocational education and the Dual System
- 3. International Cooperation

4. Current Developments



#### **Topic 1**

## General background information on Baden-Wuerttemberg and Germany



#### State of Baden-Wuerttemberg

Population: 10,747,000

• Size: 35,725 km<sup>2</sup>

No natural resources



#### **Economy in BW**

- Employees: 5.5 Mio.
- Unemployment rate (Jun 2014):
   BW 3.8 % (D 6.5 %)
   Youth BW 2.5%
- more than 132,000 crafts enterprises (Chamber of Crafts)
- more than 102,000 industrial enterprises (Chamber of Commerce)
- About 60% of all enterprises have the right to participate in the training in the Dual System - 80% of them actually train young apprentices Folie 5



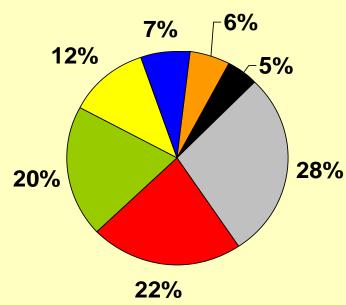








#### **Main Industries in BW**



BW holds a percentage of 4.3 % of the world's total engineering market, as compared to nations like Great Britain (3.1 %) or France (4.0 %)

- Engineering
- Automotive Industry
- Metal Industry
- Electronics
- Optical Industry
- Chemical Industry
- Others



## Topic 2 Vocational Education and the Dual System



#### **German Federal Law**

According to our "constitution", the Basic Law of the Federal Republic of Germany (Grundgesetz, Art. 70):

"All educational issues are decided by the individual Federal States autonomously" (Länderhoheit)



## Federal Republic of Germany - in charge of -

- Creating common frameworks in general questions of education
- Framework of curricula in vocational education
- Framework and basic principles of university education
- Scientific and technological research

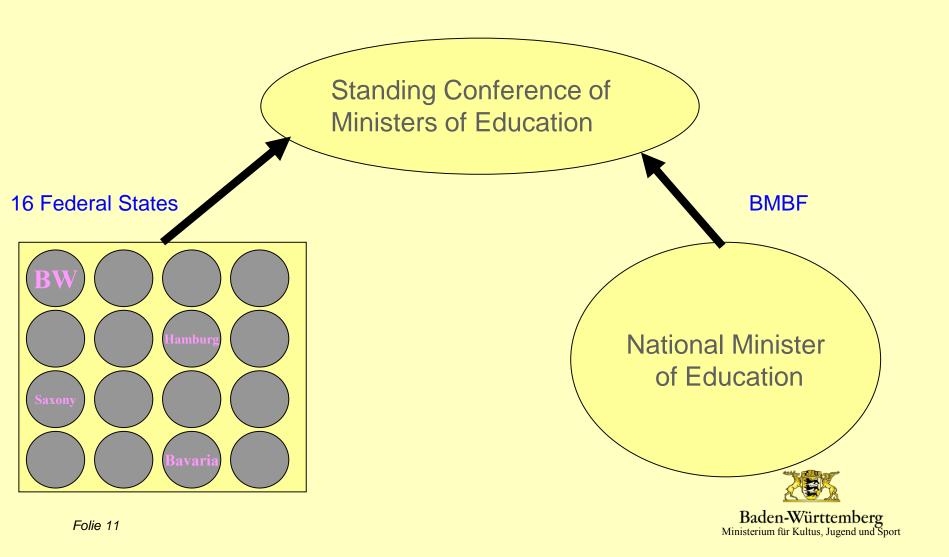


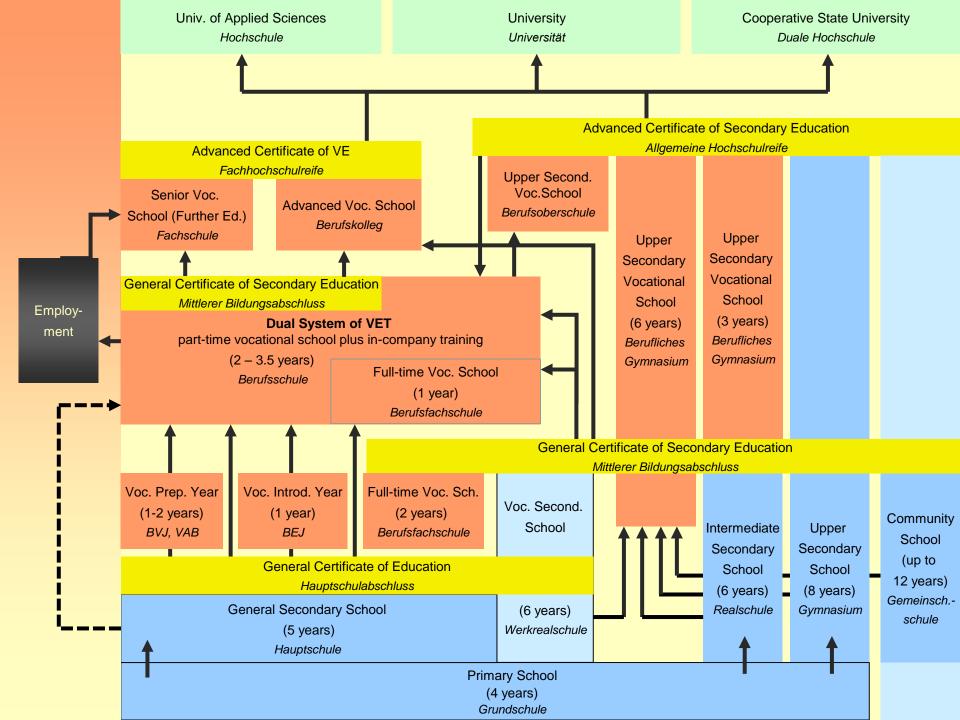
## Federal States (Länder) - in charge of -

- Implementation of educational system within the general framework of the Federal Republic of Germany
- General framework is agreed upon by the education ministers in the Standing Conference of Ministers of Education



### Coordination between Federal Republic and Federal States

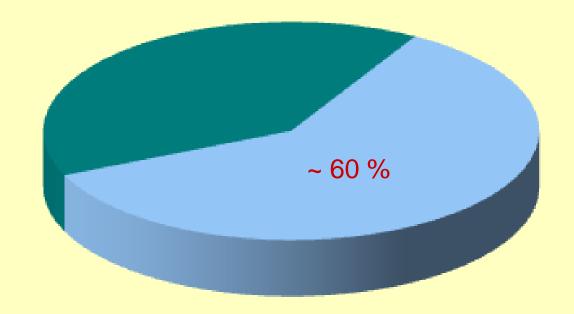




#### **Dual System**



#### Participation in the Dual System



about 60% of an age cohort are trained in the DS



#### Facts and Figures (2013-2014)

#### **Dual System of Training:**

- Total of 190.730 apprentices (-1.3% to last year) in approximately 250 professions trained in BW
- About 50.000 in the field of crafts

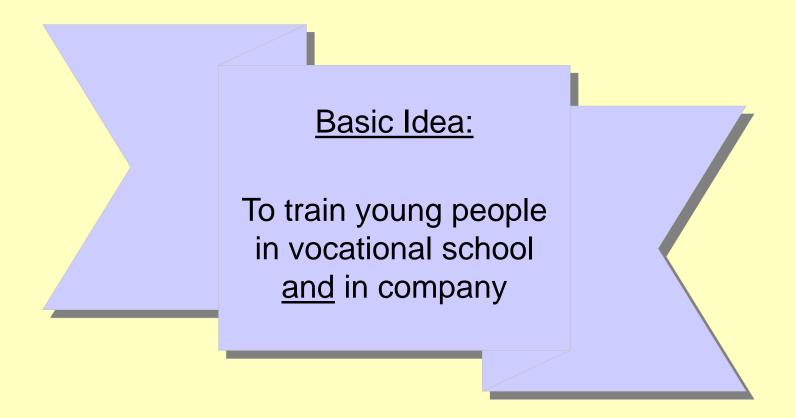
#### **Full Time Vocational Schools:**

 Total of 168.233 students (+0.3%) in various full-time schools



#### The Dual System in VET

training to become a Skilled Professional





Two educational centres!



#### The two Educational Centres

#### **Dual System in VET**

#### 70% company-based training

## Law of the Federal Republic of Germany: BBiG Training Regulations (Ausbildungsordnung) 3.5 days per week work experience (33 weeks per year)

#### 30% at vocational school

 State Law of Baden-Wuerttemberg:
 Framework Curriculum (Rahmenlehrplan)
 1.5 days per week theory (13 weeks per year)



#### We are confronted with

- Globalization
- International competition
- Technological changes
- Demographic development
- Educational mobility
- Need for life-long learning
- •



#### What is our advantage?

- Modern training programmes in about 330 professions
- Training is a combination of theory and practice
- VET takes care of employment and labour market needs
- State of the art technology in VET
- Preparing young people for employment and life-long learning combined with the possibility to enter tertiary education



#### How do we achieve this?

#### In cooperation with the dual partner:

- Curriculum and training regulation development
- In-service training for teachers
- Generation of teaching materials
- Common centralized exams with our dual partner

#### **Administrative level:**

Assessment and quality management systems



#### Cooperation between the dual partners

#### Very close cooperation on all levels:

- Federal ministries and ministries on state level
- Ministries and industrial associations (e.g. Development of Curricula)
- Ministries and social partners
- Chambers and local school authorities
- Enterprises and vocational schools
- Teachers and company trainers



Permanent demand for modernization of VET!



#### **Changes in Requirements**



Car mechanic





Car mechatronic



Car electrician





### Car Mechatronic Changes in Requirements 2013

- Technical changes in engine technology
- High voltage engines
- Fuel cell technology
- Reduced emissions

With a total of 329 professions (2014) roughly 350 modernizations have taken place since 1998 according to "Lernfelder" (areas of competencies)





#### **Modern Curricula**

- Special emphasis is placed on vocational competencies
- Learning units are no longer taught according to traditional vocational subjects but according to vocational competencies (Lernfelder)
- Part of these competencies are taught in vocational English
- Project work and problem solving techniques become part of the modern curriculum
- general subjects (e.g. German, Economics) and optional subjects
   (e.g. for University Entrance Exam) still play a major role

#### **Advantages of the Dual System**

- Training in the Dual System is open to all school leavers
- The Dual System is free of charge for the students students even get an apprenticeship pay
- It provides basic and specialised professional training and broadens general education
- Practically-oriented training combined with theory
- Maximum exposure to job reality
- It generates the specialist for the needs of economy
- Match between supply and demand of highly qualified skilled professionals
- Low rate of youth unemployment (BW 2.9%)



#### Topic 3

## International Cooperation of Baden-Wuerttemberg in Vocational Education and Training



#### **European Level**

### A wide range of programmes of the EU to support cooperation between colleges all over Europe:

- In the field of language projects
- School projects
- School development projects
- Projects in in-service-training
- Development of teaching materials
- Creating European networks in VET
- Increasing the mobility of young professionals



#### State Academy Esslingen



In-service training for lecturers and human development in vocational colleges

On behalf of the Ministry for Culture and Education Baden-Württemberg rAöR



## International Projects of State Academy Esslingen in VET

Since 2002 the State Academy for In-Service-Training and Human Resources Development in Esslingen has been offering in-service-training seminars on demand.

- Consultation
- Support systems for modernizing professions
- Tailor-made modular courses in state-of-the-art methodology and educational science
- Train the trainer programs
- Training of managerial staff and educational experts (of ministries e.g.)
- Coaching abroad



#### **Topic 4**

## Current Developments in VET in Baden-Württemberg



#### Fields of development

#### Some examples regarding vocational schools (dual system):

- OES school certification by the ministry of Baden-Württemberg
- <u>Inclusion</u>: joint education of disabled and regular students introduction of special education service
- Introduction of school budget for professional development of teachers according to school-specific needs
- Introduction of English language as an independent subject in VET
- <u>Individual support system</u>: special education service (diagnosis) together with individual support by teachers

Baden-Württemberg

Ministerium für Kultus, Jugend und Sport

#### Thank you for your attention!

#### For further information please contact

**Uwe Peleikis** 

Studiendirektor

Ministerium für Kultus, Jugend und Sport

Baden-Württemberg

Kaufmännische Schule 1 Stuttgart

Tel.: +49-711-61927-14

Fax: +49-711-61927-20

Uwe.Peleikis@stuttgart.de

www.ks1-stuttgart-de

**Hartmut Mattes** 

Ministerialrat

Ministerium für Kultus, Jugend und Sport

Baden-Württemberg

Tel.: +49-711-279 2742

Fax: +49-711-279 2942

Hartmut.Mattes@km.kv.bwl.de

