



# Vocational Education an Training City of Nuremberg

28th February 2023







### **Agenda**

- 1. Vocational training City of Nuremberg: Facts and figures
- 2. Vocational training Nuremberg's competence centers
- 3. Organization chart City Administration
- 4. Vocational training schools in Nuremberg Types of vocational schools (DQR 1-6) within Bavarian School System
- 5. Integration classes at vocational schools
- 6. Quality management at vocational schools and quality frame for municipal schools in Nuremberg



### Overall Picture Students at public vocational schools in Nuremberg SY 2022/23

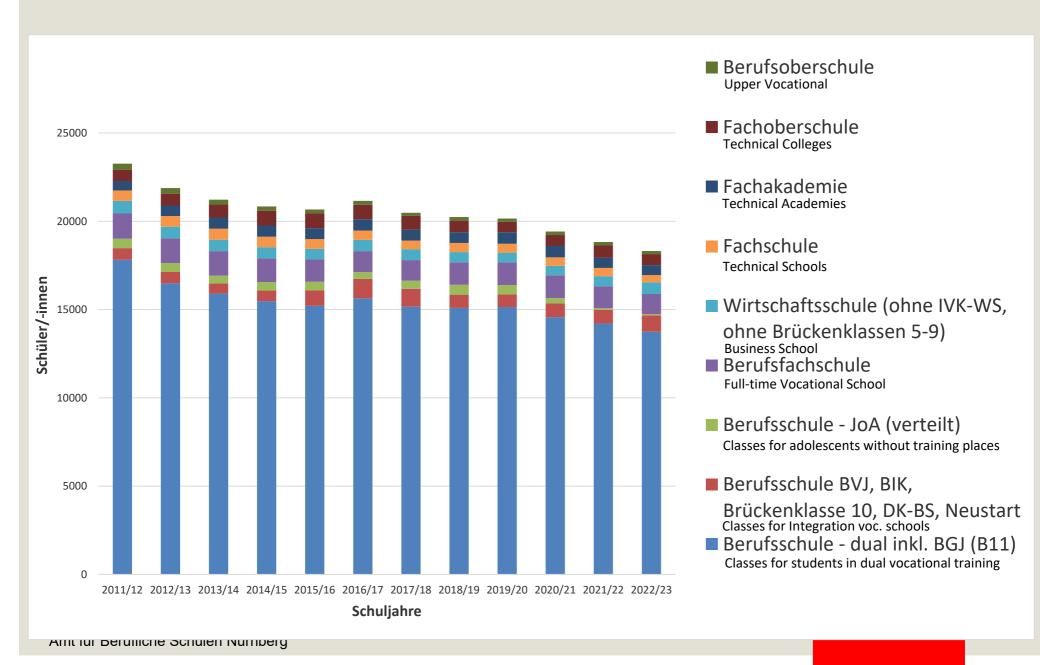
School enrollment	SY18/19	SY19/20	SY20/21	SY21/22	SY22/23	Compared to previous year
Dual vocational training*	15.091	15.233	14.573	14.214	13.741	-3,3%
Vocational preparation	1.310	1.226	1.042	824	929	+12,7%
Full-time school-based training at voc. schools	1.274	1.286	1.288	1.248	1.138	-8,8%
Upper vocational schools an technical colleges	3.507	3.266	3.164	3.238	3.147	-2,8%
Technical schools and technical akadamies	1.120	1.116	1.122	1.051	977	-7,0%
Commercial school**	582	548	537	570	658	+15,4%
Total	22.884	22.675	21.726	21.145	20.594	-2,6%

<sup>\*</sup> Including 10<sup>th</sup> grade (dual and full-time courses)

<sup>\*\*</sup> Including language training classes for students from abroad

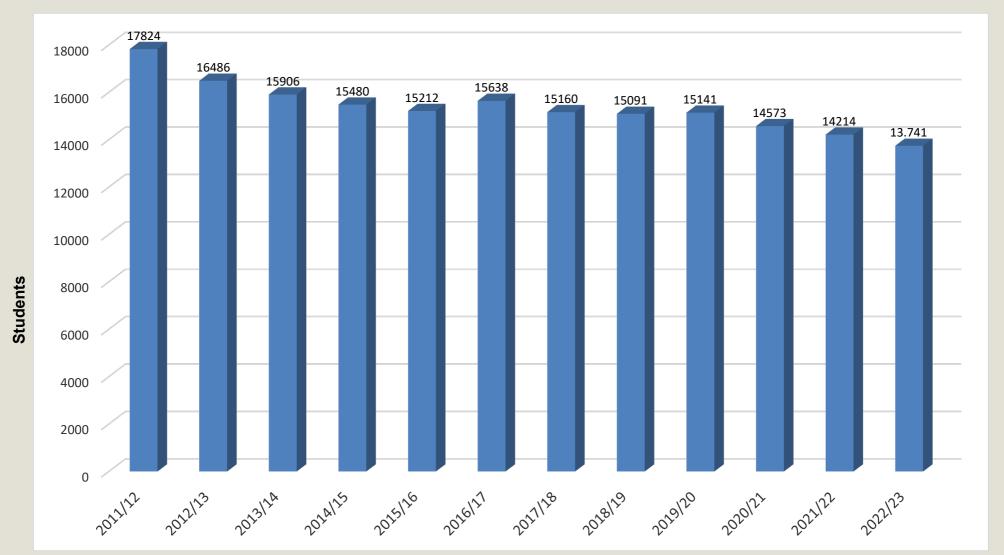


#### **Trends - Vocational schools**





### **Dual vocational training - Trends**





### **Trends – Selection of recognized trades**

Commercial (exemplaric)	School Year 2014/15	School year 2015/16	School year 2016/17	School year 2017/18	School year 2018/19	School year 2019/20	School year 2020/21	School year 2021/22	School	Annual change % (previous year)
B4, Qualified bank clerk	387	323	309	295	269	262	244	235	196	-16,6%
B14, Warehouse logistics assistant	717	720	733	740	779	792	752	771	707	-8,3%
B14, Logistics manager	423	458	488	510	533	543	494	461	451	-2,2%
Technical branches (exemplaric)	SY 2014/15	SY 2015/16	SY 2016/17	SY 2017/18	SY 2018/19	SY 2019/20	SY 2020/21	SY 2021/22	SY 2022/23	Annual change % (previous year)
B1, Mechatronics engineer	390	400	413	439	468	502	489	505	499	-1,2%
B2, Industrial mechanic	376	363	363	336	331	335	323	298	279	-6,4%
B3, cook	311	303	304	284	293	271	223	203	204	+0,5%
B11, house painter, varnisher	105	99	100	111	99	109	104	122	112	-8,2%
Healthcare professions (exemplaric)	SY 2014/15	SY 2015/16	SY 2016/17	SY 2017/18	SY 2018/19	SY 2019/20	SY 2020/21	SY 2021/22	SY 2022/23	Annual change % (previous year)
B8, Med. assistants	875	873	931	933	963	967	956	1.007	1.029	+2,2%
B5, Hairdressers	180	153	185	197	192	203	198	185	164	-11,4%



# Reasons for decrease in vocational training throughout Germany

- Decreasing attractiveness of professions within the area of manual crafts and caring professions
- Recruitment: High chances for adolescents to find training places but not always in finding ones dream job
- Low youth unemployment (5.7 % in Germany compared to 10.1 % europewide)
- Companies often cannnot find suitable applicants
- Structural transformation from industrial society to information society
- Public awareness: Equivalence of vocational training and academic training has to be strengthened
- Parents preferences
- Companies preferences: Decrease of willingness to hire apprentices (recruitung problems)
- Competition between students in dual vocational training and bachelors
- Increasing dropouts in dual voc. training



#### Stadt Nürnberg - Organisationsstruktur Mayor of the City of Nuremberg (Oberbürgermeister, OBM) Divisions (Div.) Referees Ref. VII Div. Ref. I/II Ref. III Ref. IV Ref. V Div. Div. Ref. VI Finances, Personell, IT & **Environment** Youth, Commerce Urban **OBM** Schools & Deputy Deputy & Healthcare Families & Organisation Planning Sports Mayor Mayor Social Affairs Mr Riedel Ms Walthelm Hr. Vógel Hr. Fraas Hr. König Fr Prof. Lehner Fr. Trinkl Hr. Ulrich Fr. Ries Institute for **Property** Sports-Services Vocational General Pedagogics & Management for (SpS) **Schools** Education School-Schools Department Department (SchB) psychology (HVE) (SchA) (IPSN) **Municipal Vocational Schools B7 B1 B2 B3 B4 B5 B6 B8 B9 B10 B11 B12 B13 B14**



#### **Supervision**

#### **Administrative Supervision**

#### **Supervision of Schools**

#### **Stadt Nürnberg**

- Provides Municipal Schools
  - Local educational policy City of Nuremberg

### Bavarian Ministery of Education and Culural Affairs (StMUK)

#### **District Government**

- Trade Schools (Dual Voc. Schools)
- Commercial/business Schools
- Full-time Voc. Schools
- Technical Schools
- Technical Academies

### Representative of Ministery

- Technical College
- Upper Vocational School



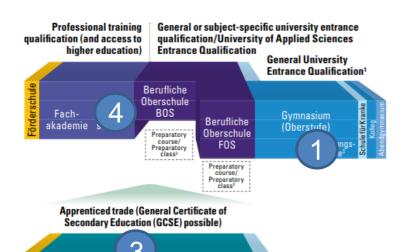
B1 B2 B3 B4 B5 B6 B7

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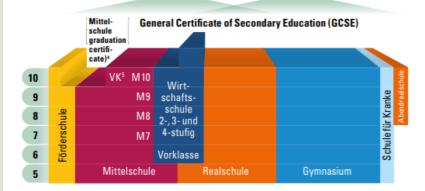


# The Bavarian school system offers a wide range of opportunities:

- 1. General Education
- Vocational Education
- Vocational Schools Dual System:
  - a. day classesblock release
  - Fulltime classes for vocational preparation
  - c. Fulltime Vocational Schools
- Advanced Vocational Training
  - Berufliche Oberschule (Upper Voc. Schools), FOS/BOS
  - b. Fachakademien (Upper Voc. Academies)
  - c. Fachschulen (Technical Schools)



Berufsfachschule



Berufsschule im

dualen System





#### **Vocational Schools**

University
University for applied sciences

#### Higher vocational qualification

Fachoberschule

Schools)

Berufsoberschule

Fachschule

**Fachakademie** 

(Upper Vocational

### **Vocational Training**

Berufsschule (Dual System)
Berufsfachschule (Fulltime Voc. School)

#### Basic vocational training

Wirtschaftsschule (Business/Commercial School)



### Nationwide Figures – dual vocational training

- 324 recognized trades
- Some of them structured in different disciplines or fields
- 1,33 million apprentices in Germany 2022



#### **Vocational Competence Centers**

**B1** 



Elektrotechnics, mechatronics technicians, metalworkers, plumbing & heating installers, master school for sanitary, heating & air conditioning



Commercial trades: wholesale trade, insurance salesmen, assistant tax consultants, automobile sales management assistants, bankers, market & social research

**B5** 



Full-time school for tailors, technical school for clothing engineering, hair dressers, florists, integration classes and vocational preparation

**B3** 

Industrial metalworkers,

automotive trade,

technical school

(constructional, electrical, mechatronic,

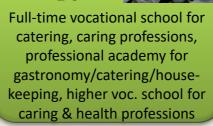
infomatics engineering)



Catering, gastronomy, bakers, butchers, shop assistants

**B6** 

Media, printing and marketing professions, retailers, technical school for printing technology, BS+ (courses for vocational qualification university entrance certificates)







Healthcare professions, fulltime voc. school for laboratory assistants





Trade and full-time school for office clerks, social insurance assistants, adminstrative assistants in public service

**B10** 



Full-time voc. school for child care assistants, voc. academy for child care and pre-school teachers



**B11** 

Building trades, wood crafts, master school for painters





Business/ commercial school

**B13/BON** 

Municipal upper vocational school





**B14** 

Logistics & warehouse, transport professions, tourism, legal assistants

### **Dual vocational training – Trade Schools**

#### 1. Berufsschule

- Access: after graduation from a secondary school
- Full-time compulsory education has to be be finished (9 years of general education at the least)
- Requires vocational training within a company and contract with a company or master craftsman
- Part-time school (part-time or block release)
- Length of training: 2 up to 3.5 years depending on profession
- Intermediate school-leaving certificate can be achieved
- Ends with certificate of responsible Chamber (Competent body), e.
   g. Certificate of the Chamber of Commerce and Trade, Chamber of Crafts or Chamber of Lawyers





#### **Full-time vocational schools**

#### 2. Berufsfachschule ... (alternative to dual system)

- For students that are not able or do not wish to work besides learning
- It does not require a contract with a company.
- Full-time school (plus internship: 15 22 weeks)
- Length of training: 2 up to 3 years depending on profession
- Intermediate school-leaving certificate can be achieved.
- Ends with certificate of responsible chamber, e. g. Certificate of the Chamber of Commerce and Trade or Chamber of Crafts or final examination (officially recognized certificate, e.g. as registered management assistant)

#### **Business/Commercial Schools**

#### 3. Wirtschaftsschule

- Full-time school: Pre-class (6th grade), regular classes from 7th/8th — 10th grade or 10th – 11th grade
- Prepares students for office careers
- Focus on general education and basic vocational training (economic and administration)
- Final exams Intermediate school-leaving certificate can be achieved
- Entrance qualification for Upper vocational schools (FOS)



#### **Upper Vocational Schools**

#### 4. Berufliche Oberschule (Fachoberschule)

- Entrance requirement: Intermediate school-leaving certificate
- FOS: Does not require a vocational certificate
- Includes internship in 11th grade
- Full-time school, 11th/12th grade providing general education including vocational studies and work experience (16 – 20 hours per week in 11th grade)
- Student choose one of 5 different branches:

**Technology** 

Agricultural Economics

Economics, Administration, Law

Social Studies

Fine Arts

- Optional: 13th grade
- Ends with final exams:

12th grade: University of Applied Science entrance certificate

13th grade: University entrance qualification (all study paths)

#### **Upper vocational Schools**

#### 5. Berufliche Oberschule – Berufsoberschule BOS

- Entrance requirement: Intermediate school-leaving certificate plus vocational certificate
- Full-time school, 11th (pre class or pre course)/12th grade providing general education and vocational studies
- Student choose one of 4 different branches:

Technology

Agricultural Economics

**Economics** 

Social Studies

Fine Arts

- Optional: 13th grade
- Ends with final exams:

12th grade: Exams qualify for Universities of Applied Sciences

13th grade: University entrance qualification (all study paths)

#### **Vocational Education**

#### 6. Fachschule (Technical School)

- Provides profound further vocational education
- Entrance requirements are a vocational certificate plus adequate work experience
- Full-time or part-time courses last from 1 to 4 years (depending on specific training qualification)
- Wide range of different branches in the area of technology, craftsmenship: e.g. civil engineering, electrical engineering, textile engineeering, chemical engineering, printing technology and modern media, etc.
- Student finish technical school as state-licenced technicians or master craftsmen
- Final exam comprises the Intermediate School Certificate
- With supplementary exam student attain qualification for entrance at universities of applied sciences

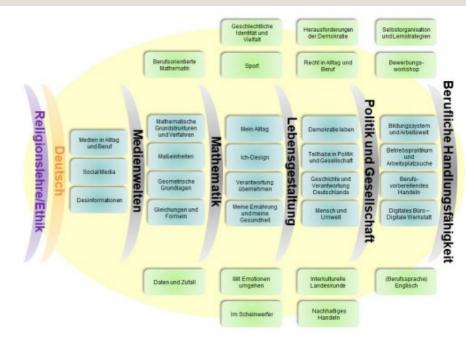
#### **Vocational Education**

#### 7. Fachakademie (Upper vocational Academy)

- Provides profound vocational studies and leads to middle management or to advanced careers in the social services
- Entrance requirements are a vocational certificate or adequate work experience in addition to the Intermediate School Certificate
- Full-time courses last from 1 to 2 years (depending on specific training qualification)
- Range of different branches in the area of technology, business and social studies:
  - e.g. business administration, orthopedagogy, social pedagogy, home economics, languages etc.
- Final state examinations
- Passing supplementary finals students attain qualification for entrance at universities of applied sciences
- Very good grades qualify for university (defined set of subjects)

### Integration Classes at Trade Schools and Business Schools

- Students mostly come from southeastern Europe, Syria, Iraq, Iran, Africa, Ukraine, etc.
- Compulsory education at trade schools (if no other school is attended) for adolescents from the age of 16 to 21
- 2-year educational concept, full-time classes:
  - Vocational integation pre-class (1st year)
  - Vocational integration class (2nd year)
  - Grade repetition possible (max. 4 SY)
- Special classes for students arriving throughout the year
- Curriculum: classes
   for vocational preparation
   and integration:
   German, math, media, life style,
   politics & society, ethics/religion,
   vocational preparation





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### Integration Classes Municipal Vocational Schools Nuremberg

Integration classes at Trade and Business Schools – Nuremberg SY 2022/23

Туре	Classes	Students
Pre-classes school-based		
BIK/V schulisch	11	168
Integration classes, school-based		
BIK/schulisch	8	232
Integration classes, cooperative		
BIK/kooperativ	4	83
"bridge classes" for Ukrainians		
Brückenklasse 10th grade (Trade School)	1	23
Language classes, entire SY 2022/23		
DK-BS ganzjährig	2	49
"bridge classes" for Ukrainians		
Brückenklasse 5-9th grade (Business		
School)	2	41
Integration pre-classes (Business School)		
IVK (WS)	3	69
Language classes, less than 1 SY		
DK-BS unterjährig	2	75
Total	33	740



## NQS – Quality Management System at Vocational Schools in Nuremberg

- First established in 2003
- Sub-Areas
  - » Development of teaching
  - » Organizational development
  - » Human ressources development

#### NQS - Nürnberger Qualitätsmanagement an Schulen

Die Beruflichen Schulen vermitteln eine berufliche Grund- und Fachbildung und erweitern die zuvor erworbene Allgemeinbildung. Damit befähigen sie zur Erfüllung der Aufgaben im Beruf sowie zur Mitgestaltung der Arbeitswelt und Gesellschaft in sozialer und ökologischer Verantwortung.

Um diesen zunehmend komplexer werdenden pädagogischen Herausforderungen gewachsen zu sein, ist ein Schulentwicklungssystem, das der ständigen Entwicklung und Qualitätssteigerung des Unterrichts und der Schule als Organisation sicherstellt, unerlässlich.

Das Nürnberger Qualitätsmanagement an Schulen (NQS) ist ein Schulentwicklungssystem, das unter wissenschaftlicher Begleitung entwickelt wurde. Es bildet die gemeinsame Basis der Qualitätsarbeit der Beruflichen Schulen der Stadt Nürnberd.

NQS besteht aus fünf eng miteinander verzahnten Elementen:



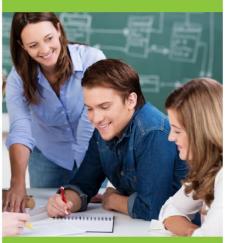




Amt für berufliche



Schulentwicklung und Qualitätsmanagement an beruflichen Schulen der Stadt Nürnberg





## NQS – Quality Management System at Vocational Schools in Nuremberg

#### **Hierarchy of Objectives**

Fields of action defined by/for all municipal schools in Nuremberg

Developed by teaching staff, students & stakeholders of schools

Generated by teaching staff within annual conferences

Orientation Framework

Mission of Vocational School

Social
Challenges
and new
concepts
developed by
Bavarian
Ministry of
Education &
Cultural
Affairs

Full Year Targets
Measures



## NQS – Quality Management System at Vocational Schools in Nuremberg

#### **Elements**

- Proccess control (by NQS-team)
- School's mission
- Self assessment
- Individual feedback for teachers, unit managers & headmasters
- Evaluation by external experts

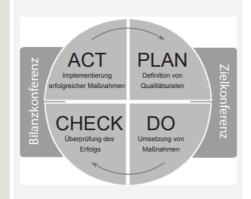
#### **Prozesssteuerung**

Die NQS-Prozesse werden durch ein mit der Schulleitung kooperierendes NQS-Team koordiniert und gesteuert. Das NQS-Team stellt sicher, dass die von der Schule angestrebten Qualitätsstandards eingehalten werden und kontinuierlich an Qualitätsverbesserungen gearbeitet wird.

Die Hauptaufgaben des NQS-Teams sind:

- Organisation von Ziel-/ Bilanzkonferenzen
- Implementierung qualitätsverbessernder Maßnahmen
- Durchführung und Auswertung von Evaluationen
- Dokumentation der Qualitätsarbeit
- Kommunikation des NQS-Prozesses innerhalb des Kollegiums

Schulentwicklung orientiert sich am PDCA-Zyklus:



#### Qualitätsleitbild

Das Qualitätsleitbild stellt den Rahmen des Qualitätsmanagements dar, da in diesem Werte, Normen und Standards festgelegt werden. Es enthält Aussagen zu den Bereichen Unterrichts-, Personal- und Organisationsentwicklung und bildet die Grundlage für die Formulierung von Qualitätsentwicklungsschwerpunkten und die darauf aufbauende Formulierung von schulweiten Jahreszielen sowie von Berufs- und Fachbereichszielen.

#### Individualfeedback

Das Individualfeedback ist ein Werkzeug, das die Lehrkräfte regelmäßig nutzen, um sich von den Schülerinnen und Schülern und bei Bedarf auch von Kolleginnen und Kollegen eine Rückmeldung über den eigenen Unterricht einzuholen.

Im Fokus der Befragung der Schülerinnen und Schüler oder der Beobachtung durch Lehrerinnen und Lehrer stehen die Unterrichtsqualität, das Lehrerverhalten und die Lehrerpersönlichkeit. Ziel ist es, den Unterricht und die Lehrer-Schüler-Beziehung laufend zu verbessern und den aktuellen Bedürfnissen der jeweiligen Schülerinnen und Schüler anzupassen. Darüber hinaus profitieren die Schülerinnen und Schüler von der Vorbildfunktion einer gelebten Feedback-Kultur.

#### Selbstevaluation

Um das Entwicklungspotential einer Schule zu identifizieren, werden regelmäßig Befragungen möglichst aller wichtigen Interessengruppen wie Schüler, Eltern, Betriebe und Lehrkräfte durchgeführt.

Diese Datenerhebung bildet die Grundlage einer umfassenden Analyse des Ist-Zustands der jeweiligen Schule. Aus Soll-Ist-Diskrepanzen werden Qualitätsentwicklungsschwerpunkte abgeleitet. Im Rahmen von Zielkonferenzen beschließt das Kollegium geeignete Maßnahmen und setzt diese gemeinsam um.

#### **Externe Evaluation**

Im Rahmen der Externen Evaluation werfen unabhängige Schulentwicklungsexperten einen Blick auf die Schule. Schwerpunkt der Beurteilung ist dabei die Qualität der Schulentwicklungsprozesse. Im Rahmen der Externen Evaluation wird festgestellt, ob die Schule im Sinne einer lernenden Organisation in der Lage ist, Qualitätsdefizite zu erkennen und zu beheben.

Als Ergebnis erhält die Schule wertvolle Hinweise zu Verbesserungspotentialen und Rückmeldung zu ihren Stärken.



#### **Orientation Framework**

(Municipal Schools – City of Nuremberg)

#### Fields of action

- Supporting language skills
- Competency based training
- Supporting and interlocking transitions
- Human ressources development
- Multi-professional expert teams
- Digital education
- Internationalization
- Democracy
- Inclusion of disabled (in regular schools)
- Orientierungsrahmen (nuernberg.de)



Ein am Kind/ Jugendlichen/ jungen Erwachsenen orientiertes Schulwesen

Nürnberger Orientierungsrahmen für die städtischen Schulen



### Thank you for your attention!

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