

Vocational school teacher degree program in Dresden

History

University vocational teacher training in Dresden began in 1924. Taking into account predecessor institutes, it dates back to 1855, when teachers of Mathematics, Science, and Technology were trained at the Royal Saxon Polytechnic Institute in Dresden under the significant influence of *Hofrat* Oskar Schlömilch, Professor of Advanced Mechanics. Starting in 1862, teachers from Saxon technical training institutes, commercial, trade, technical, and lower secondary schools, as well as upper secondary schools completed their training here. With the economic upswing in the 'founding years' and a resulting Saxon law of 1873, that, among other things, required every male school graduate to attend an advanced training school, the need for teachers with a vocational orientation increased. This did not only apply to the state-run advanced training schools, which were increasingly profiling themselves vocationally. There was also a need for qualified teachers at craft and home economics schools, as well as trade schools and factory schools for industry.

The development of trade teacher training in Saxony began in 1912 with the founding of a trade teacher seminar at the state technical colleges in Chemnitz. In 1922, by ministerial decree, its examination authorization went to the Technical University of Dresden for trade teachers, and to Leipzig for diploma teachers of commerce and agriculture.



Development in the Weimar Republic

The basis of the training at the Technical University of Dresden is Decree No. 431 of the then Saxon Ministry of National Education of December 18, 1923.

With the appointment of Richard Seyfert (1862–1940) as professor of 'Practical Pedagogy' and his appointment as director of the Pedagogical Institute at the Technical University of Dresden, trade teacher training was also academicized. At the same time, the appointment procedure for the chair of Theoretical Pedagogy, which Richard Kroner received, was underway as of July 1924.

This appointment was made primarily thanks to Victor Klemperer (1881–1960), then director of the General Department, and Robert Ulich (1890–1977), director of the Saxon Ministry. Paul Luchtenberg (1890–1973) was subsequently appointed as Seyfert's successor in 1930 as Professor of Pedagogy and Vocational Education.

The academic training of trade and elementary school teachers began on May 5, 1924, with the incorporation of the Pedagogical Institute, which had emerged from the Dresden (Strehlen) teaching seminar, into the General Department (starting in 1925, the Department of Cultural Studies) of the Technical University of Dresden. Elementary school teachers were required to complete a six-semester degree program, while trade teachers were required to complete an eight-semester program.

Examination regulations issued in August 1925 governed the type and requirements of the final examination as well as the training course itself. Graduates of technical faculties had the opportunity to take the teaching certificate examination after completing an additional two-semester degree program. It is interesting to note that the graduate degree for trade teachers could not initially be awarded.

Opposition to this came both from the business community, especially the skilled trades, and from university professors. The former feared that the degree program would be too theoretical and not geared to practice, while the latter saw the design of the course geared to vocation-like work as an obstacle.

Compared to later established degree programs elsewhere in Germany, the course of study designed and implemented in Dresden was distinguished from the outset by a number of specific features. To a certain extent, they characterize the Dresden model of the degree program:

1. Ensuring practical experience appropriate to the profession.
2. The orientation of the degree program towards the goal of becoming a 'vocational school teacher' from the very first day.
3. The cooperative integration of the scientific, technical, and humanities potential of the entire university into the study concept of each vocational specialization.
4. The effort to closely link an academic degree program with the teaching and practical skills of students.

The implementation of these criteria, which were considered normative for Dresden, was aimed at through a series of measures, whereby implementation was possible to varying degrees depending on the given framework conditions. The following statements document such measures. Section 1 of Decree No. 431 of 1923 stipulated:

'The training includes practical work in companies of the chosen vocational field, academic training at the Technical University of Dresden, and the introduction to school practice.'

The involvement of the technical faculties as early as the 1920s is described by a contemporary witness as follows: 'It is highly commendable that a large number of professors... out of pedagogical thinking also devoted themselves to the training of vocational school teachers by scheduling special lectures and practical sessions for them and did not regard this merely as a minor task.'

In addition to separate courses that promoted a basic approach to the degree program, students also attended (and still attend) courses jointly with students from technical faculties. A graduate of 1941 assessed this fact in the following way:

"For me, the good thing about this type of degree program was the compulsion to find out, even among those who would later become chemists, economists, and in their lectures, what would be essential for our later professional work and still successfully pass the examinations in Chemistry, Food Chemistry, etc. This gave us a broad horizon; we were not 'one-track specialists'."

The intention to achieve a close relationship between the degree program and later work is already expressed in the name of an Institute for Vocational School Practice established in 1924.

In the process, students experienced an increasing level of practical and teaching requirements during their studies. While school visits were planned for the 1st and 2nd semesters, this was followed by sitting in on classes and teaching under the supervision of experienced teachers in the 3rd and 4th semesters. From the 5th semester on, teaching was done with greater independence. Two four-week internships supplemented the practical teaching sessions throughout the semester. The second internship between the 7th and 8th semester was also the examination internship. The degree program was already divided into 'vocational specializations' in the founding phase (cf. overview).

		Time as of 19												
Vocational specialization		25	32	38	43	46	53	58	62	68	74	91	93	
CWDT	Structural Engineering Specialization	x												
	Construction and Woodworking		x											
	Wood Industry and Construction			x										
	Wood and Construction Industries				x	x								
	Civil Engineering						x	x	x	x	x			
	Construction Technology											x		
	Construction, wood, and design technology												x	
CE	Chemical Industry Specialization (Chemistry)	x	x	ns	ns									
	Mathematics/Sciences (including Chemistry)					x	x							
	Chemical Engineering							x	x	x	x			
	Chemistry/Mathematics								x	x				
	Chemical Engineering												x	
EE	Mechanical and Electrical Engineering Specialization	x	x	ns	ns									
	Metal Trade with Electrical Engineering					x								
	Electrical Engineering						x	x	x		x	x	x	
	Electrical Engineering/Electronics										x			
FNH	Chemistry for the Food Industry	x	x											
	Economics/Home Economics Specialization	x												
	Home Economics		x	x	x									
	Food Industry			x	x	x								
	Foodstuffs						x							
	Food Technology							x	x	x	x			
	Food, Nutrition, and Home Economics Sciences										x	x		
MTME	Mechanical and Electrical Engineering Specialization	x	x											
	Metal Industry			x	x									
	Metal Trade with Electrical Engineering					x								
	Mechanical Engineering						x	x	x	x	x			
	Metals Technology											x		
	Metals Technology and Mechanical Engineering												x	
TCT	Economics/Textiles and Clothing Technology Specialization	x												
	Textiles and Clothing Industry		x	x										
	Textile Industry				x	x								
	Clothing Industry				x									
	Textile Engineering						x	x	x		x	x		
	Textile Technology										x			
	Textile and Clothing Technology												x	
	Mathematics/Electronic Data Processing							x	x	x	x	-	-	
	Physics/Automation Technology										x	x	-	

semesters in 1938 and to four in 1942, and despite special efforts of the university, such as the introduction of 'trimesters,' it could not maintain the original level.

On the night of the bombing on February 12–13, 1945, the teaching building at Weber Square (then Reichenbach Square) was almost completely destroyed.

From the new beginning 1946 to 1990

As early as July 1, 1946, there were again study programs for the qualification of vocational school teachers, which were able to be expanded into a regular degree program by Order No. 237 of the Soviet Military Administration of August 2, 1946, for the 'training of diploma trade teachers at teacher training faculties.' The Faculty of Education, along with the Faculties of Forestry and Municipal Economics, was thus one of the first to resume studies in Dresden after World War II.

In its historical dimension, the term 'vocational specialization' refers primarily to study profiles that are different in terms of subject matter. Changing societal and economic needs have led and continue to lead to different emphases in study program content and the resulting designations of the organizational units responsible for the study program profiles. It is interesting to note that there is a great deal of continuity over time with regard to *substantial core areas*. (cf. overview)

Development from 1933 to 1945

With the enforcement of the law for the restoration of the professional civil service, the conditions of training deteriorated from 1933 onwards, both through the dismissal of experienced university lecturers and through structural changes. Paul Luchtenberg resigned by decision of the Ministry in 1936. He later held the Chair of Vocational Education in Bonn from 1953 and was Minister of Education of North Rhine-Westphalia from 1956 to 1958. The degree program was shortened to six

Based on the founding model of 1924, there were, among others, the Institutes for Practical Pedagogy and Vocational School Pedagogy. Important chairs were filled with the appointment of Karl Trinks (1891–1981) as Professor of Theoretical and Historical Education and Hugo Dähne (1885–1967) of Vocational Education. Another typical feature of the Dresden model of vocational teacher training is that the general principles of vocational education and the didactics of vocational teaching and learning were always anchored in an independent institute or academic field. In addition, the vocational specializations formed a separate structural unit of the faculty. Following Trinks and Dähne, professors Dietrich Hering for Didactics, Hilmar Schulz for Cultural Education, Heinz Knauer for Vocational Education, and later Wilfried Lange as Hering's successor, as well as Harald Zimmer for the teaching area Logical-Methodological Foundations of Teaching Practice, were responsible for teacher training.

The various specializations (cf. overview) were initially integrated into the Institute for Vocational Education, and the degree program lasted three years. With the further profiling of the specializations within the Institute for Vocational Education, structural changes occurred; the most serious of these was the establishment of six institutes for vocational school methodology in 1958. Even if there is a risk of not being able to do justice to all 'predecessors,' the representatives of the institutes who significantly shaped their profile over a longer period of time are named.

They are the Chairs of Teaching Methodology of Willi Stähr and Werner Bloy for Civil Engineering, Günter Wirsing for Chemical Engineering, Heinz Rose for Electrical Engineering, Wolfgang Arnold for Food Technology, Heinz Lohmann, Franz Lichtenecker, and Horst Reibetanz for Mechanical Engineering, Wolfgang Lange and Heinz Lohse for Mathematics/Data Processing, Hans Backe and Helmut Mucke for Physics/Mechanics and Control Engineering, and Horst Wiesner for Textile Engineering. The specializations of Mathematics/Data Processing (1958) and Physics/Mechanics and Control Engineering (1968) were added later in this

combination.

With the 3rd Higher Education Reform in 1968, universities were restructured and in Dresden a Department of Vocational Education was founded, whose internal structure comprised four academic fields. Academic Field 1 was a basic field for vocational teacher training, and the second included all vocational specializations as 'work groups.'

The third academic field was concerned with teaching and learning research with special consideration of modern media, and the fourth had higher education and technical college pedagogical research and teaching as its work assignments.

In this phase of development, in addition to the fulfillment of original tasks in the design and realization of studies, Academic Field 1 and the vocational specializations (work groups), among other things, increased contact with business (contract research) and worked or at least collaborated on the development of job profiles, curricula, and vocational as well as vocational pedagogical evaluations through participation in vocational commissions. The development of distance learning materials in part of the specializations and foundational publications on teaching methodology in all vocational specializations also characterize this period ('teaching methodology' roughly within the scope of modern-day vocational didactics).

However, the existing ideological corset under which the work had to be carried out also deserves mention.

In the period between 1949 and 1990, 5,450 vocational school teachers were trained in all specializations by direct and, in some cases, distance learning. They graduated from the Technische Hochschule, or (since 1961) Technische Universität with the title of 'Diplomgewerbelehrer' or from 1968 'Diplomingenieurpädagoge.'

Development since 1990

The restructuring of the degree program beginning in 1990 required and brought about a number of changes for the design of the degree program and thus for the students.

- Transition from practice-

integrated single-phase to two-phase teacher training (with subsequent teacher internship).

- Requirement to study a general education second subject in addition to a vocational specialization.
- Higher degree of freedom with regard to the selection of courses (required and elective courses).
- Improvement of laboratory technical training in qualitative and quantitative terms.
- Creation of independent student self-governing bodies.

Today, the degree program is divided into a basic four-semester part (basic degree program) and a specializing, more application-oriented five-semester part (main degree program, including state examination).

Students are involved in research work as part of externally funded or budgeted projects and are introduced to other areas of academic focus. Practical pedagogical studies are, albeit to a lesser extent than in the past, part of the degree program. They are carried out in the form of two blocks of internships of 4 weeks each and practical school studies during the semester comprising at least two semester hours per week. The degree program is usually completed in the 9th semester with the First State Examination.