

CHAPTER VII

VOCATIONAL TEACHERS IN WEST GERMANY

=====

The vocational schools in Germany provide general education and give intensive vocational training. Thus, they help in the development of a useful and conscious citizen of the society. Moreover, today, the vocational schools not only provide related theoretical instruction but also they have become institutions of the 'second channel' of education and, as such, contribute to the development of man. Their task is not one of training highly trained specialists to perform only a limited function of society, but to prepare young people for coping up with the effects of technological and other environmental changes. It is not only of importance what to teach these young trainees but also WHO should teach and How.

Teachers in Vocational Schools till 1938

Teachers for vocational schools were, in the early days, usually general school teachers who were given some additional technical training in special courses. Generally

the vocational teacher handled a wide range of subjects. As a general rule each class had one teacher for almost all the subjects, or at least for most of them e.g. for trade technology, mother tongue, civics and other related subjects connected with the trade.

Recruitment and training of vocational teachers had remained a serious problem for most of time in Germany. Of the 34161 vocational teachers in 1938, 18357 i.e. 53.7% were full-time teachers and 15804 i.e. 46.30% were part-time teachers. Surprisingly enough, there were more than 50 different titles - and different salary classifications for the full-time teachers alone.¹ They were recruited largely from elementary and secondary schools or directly from industry. Very few of them, therefore, had any special training or preparation for the particular educational characteristics or problems of the vocational schools. (Berufsschulen).

During those periods, Berufsschule teachers were more commonly paid by the Community than by the States. (After 1950, most of the vocational schools' teachers are paid by the State and the Communities maintain school buildings

¹Towes Emil O. 'Principles, Problems and Trends in Vocational Education in Germany,' Office of the U.S. High Commissioner for Germany (Unpublished Report), August 1951, p.22

and equipment). A fully prepared vocational teacher, who was a specialist in his field, received a salary equal to and sometimes higher than the secondary school teacher - ranged from DM 4800 to 8400 yearly in those days - (today this amount is more than doubled). However, in rural communities, they were sometimes poorly paid, just equal to the primary school teacher.

In addition to their base salaries, they were also given an allowance for living quarters, additional amount for each child in the family (upto a certain limit, of course) pension facilities (generally varying from 35 to 75% of the annual salary drawn by him in the last year of service) and the normal age of retirement was 65. Today also most of these facilities continue.

In 1950, there were about 13 vocational teacher training institutions in West Germany; six for trade industrial teachers, two for agricultural teachers, and five for commercial teachers - the latter being attached to the commercial science departments of universities. A list of these institutions is given below :

Trade and Industrial Training Institutes

- Staatliches Berufspädagogisches Institut, Frankfurt/M.
- Berufspädagogisches Institut, München.
- Berufspädagogische Akademie Solingen, Solingen-Ohligs.

- Pädagogische Hochschule für ~~P~~öwerbelehrer, Wilhelmshaven.
- Pädagogisches Institut der Universität Hamburg, Hamburg 13.

Agricultural Training Institutes

- Pädagogische Hochschule für Landwirtschaftliche ^{Lehrer} Lehrer, München.
- Pädagogische Hochschule für Landwirtschaftliche Lehrer, Wilhelmschaven.

Commercial Training Institutes

- Handelshochschule, Frankfurt/M - Universität
- " Heidelberg "
- " Köln "
- Wirtschaftshochschule, Mannheim.
- " Nurnberg

As indicated above, three different names were used to designate teacher training institutes: Academy, Institute, and University-Hochschule. There were differences in entrance requirements as well as in the nature and the length of the training, which ranged from two to six semesters.

Vocational teacher training is the responsibility of the individual States and hence practices differ from one state to another.

Vocational Teachers in Recent Years

In recent years there has been a trend towards increased use of special subject teachers. The class-teacher system

(One class = One teacher) is being replaced in many States by an 'emphasis system' (Schwerpunktsystem) in which the general vocational teacher (Gewerbelehrer) is assisted by specialists in some of the subjects taught to the class.

Moreover, the emphasis placed on the educational aspects of their functions has largely influenced public opinion regarding vocational teacher's status, recruitment and training. The vocational teacher has rapidly become recognised as a secondary school teacher and is being accorded a salary, grading and job title equivalent to those of teachers in the full-time general secondary schools, which is sufficiently high. At the same time the entry qualification requirements are being raised to university degree level.

The following table gives the number of part-time vocational pupils and full-time vocational teachers from 1950 to 1968 in the Federal Republic of Germany.¹

TABLE 58

Year	No. of pupils in Part-time V. Schools	No. of full time teachers	Ratio between teacher and pupils
1950	1699229	15631	1 : 108
1955	2301873	21082	1 : 109
1960	1661911	24022	1 : 69
1965	1780044	24355	1 : 73
1968	1754765	24964	1 : 70

¹German Year Book - 1966, p.89 and 1970, p.73.

The table indicates that the full time teacher-pupil ratio was 1 : 108 and 1 : 109 in 1950 and 1955, but the ratio came to little more satisfaction during the years 1960 when it was 1 : 69 but it again deteriorated in 1965, 1:73 and was 1:70 in 1968. The desirable proportion should be one full time teacher per 50 pupils or the ratio 1 : 50. Judging by this standard it can be found that Germany suffers from acute shortage of trained full-time teachers.

Training of Vocational Teachers

Vocational teacher training is the responsibility of the Minister of Education (Kultusminister) in each State. Yet a certain amount of uniformity is achieved through the Permanent Conference of Ministers of Education (Ständige Konferenz der Kultusminister), a consultative body composed of all the ministers of education of all the States.

The administration of the training is in the hands of Vocational Teacher Training Institutes (Berufspädagogisches Institut) which in most instances are attached to general, ^{or} ~~commercial or~~ technical universities.

As a rule, the full vocational teacher training course is undertaken at one and the same institute. Passage from one vocational teacher training institute to another is a very difficult task. There is now a general trend towards an increasingly close similarity in the entry and examination

requirements of the various institutes. It should be remembered that the vocational teacher works under different circumstances because normally the students come only once a week (or at the most twice a week) for related instruction and again, there is a great variation in talent and personal development of trainees.

Requirements for Admission

The vocational teacher training institutes normally require their students to have passed a full secondary school leaving University entrance - examination (Hörschulreife) and to have acquired practical experience in employment as a trainee (Praktikant) or apprentice for a minimum of six to twenty four months, varying according to States. A specialised secondary school examination (Fakultätsreife) from a technical school, is sometimes accepted as sufficient qualification for entry. Some States, including West Berlin, demand supervised and planned practical experience similar to that of an apprenticeship. At least one State - Hamburg - requires teacher training candidates to have passed a final apprenticeship examination in their trade specialisation. Evening courses and special day courses of further education are available for skilled workers and other persons in employment who wish to qualify for entry into the vocational teacher training institutes. Their aim is to bring them upto normal secondary

school leaving level. These courses are referred to as the 'Second Channel to Education' (Zweiter Bildungsweg) and are generally accepted as a particularly desirable avenue towards qualification as a vocational teacher. Numerically speaking, however, only relatively few teachers enter the profession through this second channel.

Duration of Training

In Germany to qualify as a vocational teacher requires between six and eight years of practice and study. This comprises as :

- Practical trade experience in employment (a minimum period varying from 18 to 30 months)
- Academic study (3 to 4 years)
- Probationary period (12 to 24 months).

Of course, special conditions are applicable to candidates who hold diplomas from technical universities, who are permitted to sit for the vocational teacher's examination after a shorter course.

The Period of Practical Trade Experience (Praktikum)

These requirements vary greatly between States in regard to the total period - the timing and the type of employment considered as acceptable practical trade experience.

The minimum period acceptable is 18 months (in Saarland) divided into three six - month periods to be completed before,

during and after the academic studies, i.e. during the probation period. The same minimum requirements (18 months) applies in Hessen but its training is different - 12 months before and 6 months during the academic studies. The highest minimum requirement is 30 months in Hamburg. As indicated above, some States require as much as 24 months practical experience in employment to be completed before entry into the teacher training institute.

Full apprenticeship (3 years) in a skilled trade is normally accepted as completed practice, even in States which oblige the teacher-trainees to acquire some of their practical experience during, or after, their academic studies. This is a particularly important rule for those students who have qualified for entry into the vocational teacher training institute by studying at technical schools (Fach and Ingenieurschule) which as a rule require a skilled worker certificate as a basic condition for entry.

The Academic Studies

The vocational teacher training institutes normally organise courses for a wide range of trade specialisations, e.g. mechanical engineering, electrical engineering, wood work, the chemical, textile and clothing industries, commerce and office occupations, agriculture etc. Most of the subjects are taken as courses under the different departments or faculties

of the universities to which the institutions are attached.

The courses generally include :

- General Science subjects (Physics, chemistry, biology etc.) including methods of teaching applying in the trade specialisation chosen by the student;
- Educational sciences, philosophy, psychology and sociology;
- Economics, social and political sciences.

Students may extend their studies into neighbouring fields. The general tendency - reinforced by a recommendation of the Permanent Conference of Ministers of Education of 28th February 1957 - seems to be to broaden the study of pedagogies and the social, political and economic sciences, and to require less specialised studies relating to the trade chosen. This tendency runs parallel to the trend towards increased employment of specialised teachers referred to above.

The Probationary Period

The general rule is a 2-year period of probation. Three States - Hamburg, Hessen, Saarland - stipulate that at least 6 months of the practical trade experience in employment should be included in this period. During the rest of the period (in all other States, during the whole of the period), the student-teacher's time is divided between observations and supervised teaching in a specially selected school (Unterrichtsschule) and attendance at a post graduate courses (Studienseminar). The

purpose of the latter is to develop in the teacher-trainees an understanding of the pedagogical and teaching aspects of the practical experience gained in the observations and teaching practice at the school, and to broaden the young teacher's knowledge of youth psychology, the legal aspects of the employment and education, civics, industrial and other conditions of work, etc. The probationers are normally required to write reports on the activities and experience, or to prepare papers for seminars discussions on subjects related to training in their field of work.

Examinations

The academic period is concluded by a State or Faculty diploma examination. Requirements normally include a pass in one or several written and oral examinations - by subject, by year of study, or as a final examination - and the submission of one or two examination papers on a principal subject of study/ or on an educational problem.

A second State examination takes place at the end of the probation period. This examination generally includes the submission of a paper on a subject selected for special study, evaluation of the candidate's performance in a class when teaching in different types of subjects, and an oral examination.

Student-teachers who fail in their first examination are, as a rule, given a second chance.

Students at the vocational teachers training institutions are entitled to the same study grants and stipends that are available to the students at the universities.

The vocational teacher training institutes are organised as University-level institutions. Their teaching staff should normally possess university level pedagogical qualifications. They are required to undertake some scientific research work in addition to teaching.

The German system of vocational education expects that on completion of their training, the vocational teachers should possess the following :

- A level of general education considerably higher than that acquired by the average vocational school student;
- broad technical education or scientific instruction corresponding to that of a higher technician in his own field of specialisation;
- considerable practical experience, gained by working in industry, of conditions of work, including safety measures, etc.
- a knowledge of the philosophy and principles of education and of general and applied pedagogy, of general and industrial psychology, physiology and sociology, with particular emphasis on the problems of youth at work, and of the social institutions of industry along with a knowledge of certain labour legislations.

Today, all those who are connected with vocational education and training programme in Germany are conscious about the reform to training courses of vocational teachers to make ^{them} ~~it~~ more effective and attractive. The working committee of the Congress of Teachers and Educators (Kongress der Lehrer und Erzieher), adopted the following resolutions on May 1964 regarding the training of vocational teachers.¹

- 'Agreements should be reached to give vocational teachers an opportunity to work in industry at regular intervals in order to acquire first-hand knowledge of technological developments and experience of new methods of on-the-job training. During this period of practical work, vocational teachers should continue to draw their salary.'

In 1965, the University of Hamburg, in co-operation with the State (Land) Department of Education, introduced a new teacher training scheme, for different types of vocational schools.

Shortage of Vocational Teachers : A Grave Problem

It is generally agreed by all that there is a considerable shortage of trained teachers in some of the vocational schools in Federal Republic. To-day there are approximately 9000 unfilled teachers' posts in the vocational schools and colleges of Nordrhein Westfalen alone. This alarming shortage has resulted from the fact that 40% of the existing teachers have reached retiring age and the number of

¹'Kongress der Lehrer und Erzieher' in the Journal Allgemeine Deutsche Lehrerzeitung, Frankfurt/Main, Vol.16, No.12, June 1964, p.182.

students' teachers underwent training was inadequate. It is a fact that the situation is no better in the other states of the Federal Republic of Germany.¹ Some experts even fear that unless propaganda comp^gain^{ing} to stimulate recruitment for training is carried on, that too with substantial results, there is even a danger of breaking down of the vocational school system. Though this danger is a little bit exaggerated, it definitely shows the urgency of the problem.

A survey in Hessen, in 1961, on the future demand for vocational school teachers revealed that there was a considerable shortage of teachers in fields such as metal work, electrotechnics, chemistry and commerce, and a surplus in the textile trades building trades, wood work and agriculture. The survey was based on the assumption that a vocational school teacher is one who teaches about 25 hours per week in classes with an average attendance of 20 to 25 trainees receiv^{ing} 8 to 11 hours of related instructions per week.

One reason for the shortage of the vocational teachers in some fields is that the vocational teachers are specialised in their respective fields. Hence they are not interchangeable

¹Müllges Udo: 'Lehrermangel und Lehrerausbildungs-Probleme des Berufswechsels von Ingenieuren in das Gewerbelehreramt' (Teacher Shortage and Teacher Training. The Problem of Transistio from higher technician to vocational teacher) in the Journal Die berufsbildende Schule, Wolfenbuttel, Vol.19.No.4, April 1967, p.240.

between various specialised courses. Sometimes the surplus teachers in some fields are adsorbed by forming smaller classes or by employing them for teaching subjects other than their own speciality.

Again, some vocational teachers cannot be transferred from one school to another for lack of housing facilities, because of administration boundaries, or as a result of a certain 'hoarding' of teachers by some schools. Sometimes it is said that the teachers are more tied to a community than other groups of the population.

Also, the new generation of teachers prefers large vocational schools to small ones. Moreover, there is also a disproportionate increase in the number of pupils studying metallurgy and electricity etc. These conditions increase some difficulties when there is already a shortage of trained vocational teachers.

Some Efforts made in Hessen to Overcome the Problem

In order to reach the greater degree of interchangeability of teachers from community to community and between the different fields of teaching, the State of Hessen has put all vocational school teachers into the same salary group and has given them the same job title, 'Studienrat,' irrespective of their training background. Beginning from 1963, all future vocational school teachers follow a 4-year university courses, each in his respective special field, at a recognised university or technical

institute. Of course, University studies and common remunerative systems are both factors which increase the social mobility of teachers.

Yet these measures are not considered sufficient. There remains a surplus of specialised teachers in fields such as the construction trades, wood work and agriculture and a considerable shortage in other fields between which no interchange is possible. For these reasons, those surplus teachers who are prepared to enter a field in which the demand is greater than in their own, should be encouraged to undertake supplementary studies. In Hessen, it is planned to pay full salary during such studies and to assist teachers in moving to other communities.

Further Education for Vocational Teachers

Because of the changes in occupational structure, the vocational teachers are constantly obliged to acquire new knowledge and dialectical skills in different or in new special subjects and to take into account technological change in many fields. Consequently, further education has become a necessity for the vocational teacher if he is to fulfil the requirements of the job.

Today some of the vocational teachers recognise that the initial university studies are insufficient and hence, often at their own expense and on their own initiative, they attend seminars and week-end and evening courses and also courses

organised during vacation periods. Reading of technical, scientific and professional literature, exchanging experience and information with their colleagues, and similar activities, also play an important role in the continuing process of the vocational teachers' further education.

Some experts suggest that further training should be made compulsory for all vocational teachers in employment. According to them, the Chambers of Commerce and Industry (and also industrial undertakings) should organise practical training courses of 3 to 6 months. Vocational teacher training institutes should organise more full-time courses of further training in the subjects like science, technology, pedagogies, social sciences and so on. Educational authorities should support this action by granting paid leave to teachers and offering prospects of promotion.

Vocational School Instructors

In addition to the vocational teachers, there are a certain number of Vocational Instructors (Fachlehrer and Lehrwerkmeister). Their primary task is to give practical instruction in school workshops. They also give some theoretical knowledge directly related to the workshop practice. Generally this instructor belongs to a lower salary scale category than the full - time vocational teacher. He plays a relatively small role in the vocational training system yet this role is not negligible.

The status, duties and title of vocational school instructors, and their relationship with the other members of the teaching staff are not at present clearly defined. No proper training scheme also exists for them. Their ranks are likely to swell. A growing number of schools, which in the past only provided related instruction, now have training workshops; the workshops themselves are also expanding. There will be more schools training pupils for the craft trades which require a relatively high proportion of instructors. The shortage of vocational teachers - particularly acute in the metal and electrical trades - will compel schools to fall back increasingly on instructors and skilled workers drawn from these trades.

The training required of instructors today is generally confined to a master's certificate and suitable trade experience. Further training is provided through seminars organised by the Hessisches Lehrerfortbildungswerk (Association for the further training of teachers in Hessen). These seminars last a week, full-time or split up into a series of half days. They comprise lessons in pedagogies, psychology, vocational school organisation, elocution, accident prevention, and individual further trade training for each instructor in his own speciality.

It is suggested that specialised training should be introduced for instructors.

The best way to organise for such training would seem to be to set up public pedagogical institutes where supervisors and technicians would be given 12 months' training as instructors.

Staff for On-the-Job Training

As already mentioned, the apprentices in Germany receive their training and practical experience in the undertakings. This on-the-job training is very important for them. They receive related instruction and general education in part-time vocational schools (Berufsschule) which they are obliged to attend by law till the age of 18 or till they complete the apprenticeship training. They have also the trainers in the undertakings who are responsible for their vocational training.

The artisan mastercraftsmen are allowed to employ apprentices only when they hold a certificate of craftsmanship which is considered to be a sufficient qualification to train the apprentices. Sometimes the apprentices also receive their training under the vigilant eyes of the senior journeymen who supervise and guide in their work. The courses arranged for journeymen preparing for the master craftsman examination now always include training in instructing techniques and in the special problems connected with apprentice training.

In the industrial and commercial sectors, skilled workers frequently sit for the corresponding master-craftsman examination

in the artisan trades. One industry in Germany - the Printing industry - has introduced a special examination for highly skilled and experienced journeymen to become master-instructor, and undertakings are not allowed to take on apprentices unless they employ journeymen who hold a master-instructor certificate. Thus it is clear that sufficient care is taken to ensure that the right type of training is given to the apprentices by the right type of well-qualified and experienced persons only.
