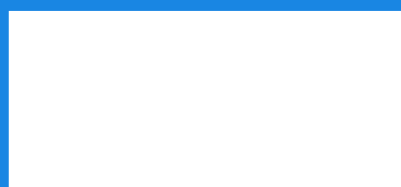




# Vocational training



**Training  
of trainers**

# Vocational training

## Bulletin of the European Centre for the Development of Vocational Training

# CEDEFOP

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## Editorial

In the Resolution of the Council and of the Ministers of Education meeting within the Council of 13 December 1976<sup>1</sup> concerning measures to be taken to improve the preparation of young people for work and to facilitate their transition from education to working life, the implementation of a number of actions at Community level is called for, including the 'implementation of pilot projects and studies to assist in the evaluation and development of national policies in respect of ... the promotion of measures to improve the initial and in-service training of teachers so that they may more effectively prepare young people for working life' and of 'workshops for teachers and trainers of teachers concerning the transition from education to working life.'

The Council thus clearly expresses its interest in the training of teaching staff and assigns to them an essential role in the task of improving conditions which determine the transition of young people from school to work.

We must agree that for a great many young people this transition is burdened with considerable obstacles when we realize that the number of young people in a specific age group leaving school without having acquired a vocational qualification exceeds in some Member States 40 %. And then for what occupation should we train young people? Can we know what occupation a young person of fifteen or eighteen years old will be following in twenty or thirty years' time? What qualifications must we enable young people to acquire today in order to ensure that they will be equipped to do the work required of them in the future? A possible answer to at least part of these problems might perhaps lie in identifying those qualifications and

aptitudes which are for the most part unaffected by economic and social circumstances, processes taking place within occupations, and technological advance.

This implies among other things that we must make the pupil 'aware of the general validity of his intellectual operations beyond the concrete situations with which he is confronted'.<sup>2</sup> This also implies that in the course of his training the pupil must acquire a capacity to learn and a desire to teach himself.

It is very difficult, if not impossible, to acquire these qualities of basic training via the basic training curriculum alone. In a study undertaken by the Council of Europe<sup>2</sup> Y. Deforge arrived at the following conclusion: 'The reply to the question "What is basic training?" appears, from within, to derive from considerations which are pedagogical and institutional in origin rather than methodological (research and qualifications) ... the sound values are not a list of qualifications or carefully defined contents, but the competences of the teaching staff, the structure of the institution, and the basic features of society.' This conclusion obliges us to give greater attention to the key factor, namely, the role, the responsibility, and the qualification of the teaching staff.

The Commission stressed the importance which it attaches to the training of trainers by selecting this task as the subject of the first colloquium which it organized within the framework of action envisaged in the Resolution mentioned.

It is evident that any major change in education is dependent on the teaching staff and that adjustments and adaptations in the field of education and training are implemented for the most part through action taken by the teachers and trainers. In order to be equal to this task they have need of a type of continuing education which will enable them to understand, evaluate, and apply methodologies and pedagogical innovations and play an active role in education and training processes. In certain cases such a system of continuing education is an indispensable help in compensating for basic training insufficiencies, and from a more positive aspect it can organically complement a basic training programme. Can one have the audacity to imagine that it will be possible to initiate on a grand scale a process of continuing education for the teaching staff? The realization of such a project is, however, one of the principal prerequisites for a successful optimization of the education systems, by means of which they would be able to adapt themselves to the exigencies of society in the year 2000.

This Bulletin marks the launching by the European Centre of an action aimed at tackling problems involved in the training of teachers and trainers in the field of vocational training.

<sup>1</sup> Supplement 12/76—Bull. EC.

<sup>2</sup> Council of Europe Doc. CCC/EGT (77) 30, p. 21.

# Training of Vocational School Teachers in Member States of the European Community

by *Antonius Lipsmeier*

## 1. Preliminary remarks

In order to deal properly with structures and trends in connection with the training of vocational school teachers in Europe it is necessary, in view of the multinational constellation and the trend towards 'bloc-building', to first identify commonalities. A glance backwards into the history of vocational training quickly reveals that in spite of the obligatory period of travel which characterized training in the various handicraft guilds a few centuries ago and also in spite of the widespread custom during the middle ages of sending young people in northern and southern Germany undergoing training for mercantile pursuits abroad for a period of training, with the consequent tendency in both cases towards similarity of training in western and eastern Europe, specific nation-State structures of training in the crafts began to dominate as industrialization set in, although in Germany, for example, the phase of differentiation within the vocational school system which set in around 1830 was still characterized by value placed on experience gained abroad.<sup>1</sup> It is only at the medium and higher level of vocational schooling that common trends of development in Europe in former times can be distinguished. One exemplary model is the *Ecole Polytechnique*, established in Paris in 1794,<sup>2</sup> which was in fact the forerunner of the present European model of the technical college. And even though we should not overlook the fact that trends developed from the practice on the European continent during the first third of the 19th century of providing State support for crafts and industry—Great Britain was at that time already ahead of Europe in the development of its crafts and industry—and from world exhibitions held in various countries of Europe from the middle of the 19th century on which should have led to a unification of educational systems as regards general education, and vocational training in particular, it can-

not be denied that the respective stage of industrialization was determinant for the type of approach taken by each nation state with regard to vocational training in the crafts and the commercial trades.

Although a comparative history of the training of vocational school teachers in Europe is not yet available, it can be assumed that in the train of the formalization and institutionalization of vocational training and the development of various vocational training models differences in the training of vocational school teachers have become apparent. Before I proceed, however, I would like to clarify the terms used in this article.

Vocational school teachers are persons who are equipped to undertake the initial vocational training of young people at the lower and middle qualification level (skilled workers, semiskilled workers, workers in commercial trades, agricultural workers, and technicians) and who are engaged in this work regardless of whether they have undergone teacher training for this purpose or have undertaken this task by virtue of their qualification as experienced operative. The target group is furthermore limited to those persons who are teaching at upper secondary school level.<sup>3</sup> Excluded are teachers providing instruction in the continuing education sector or in the various streams of education and training of the tertiary sector (university level). It must of course be borne in mind that in many Member States the upper secondary school sector is more or less interlocked with both the tertiary sector and the continuing education sector. This article furthermore limits attention to vocational school teachers who have been employed to teach technical and commercial subjects. Other subject fields such as agriculture, domestic science, social studies, and mining must be left out of account in the comparative analyses by virtue of the extremely broad span of differences which exists.

The general situation and the problems facing vocational school teacher training in Europe can well be illustrated by a brief review of the history of this type of training in Germany, since a parallel development characterizes without doubt a number of other European countries.

## 2. History of vocational school teacher training in Germany

As the vocational school system began to develop in supplementation to the traditional apprenticeship to a master in the early years of the 19th century, it became necessary in increasing measure, in view of growing differentiation, to set up a system of teacher training. Until that time instruction had been given by primary school teachers, clerics, and craftsmen. At one of the first technical colleges, namely the Polytechnic School in Karlsruhe, Baden, the first full academic course of training for technical teachers was established in 1834. Baden thus took the first step. After 1880 this type of training in Baden was transferred from technical colleges to technical schools. By the time World War I broke out the training of technical teachers and commercial teachers had been introduced in Bavaria, Württemberg, Prussia and Saxony. From about 1900 on the newly founded commercial schools (commercial colleges) trained commercial teachers. Also, State instruction for primary school teachers teaching part-time at vocational schools was prolonged from a number of weeks to one year. These one-year courses of instruction, a number of which were conducted also at training institutions specially established for this purpose, were in many instances also open to technical school graduates and masters, or so-called 'Praktiker' (opera-

tives). With this brief reference to the academization of vocational school teacher training and the admittance of masters and technical school graduates to this teacher training a number of central problems which were subject to controversy for decades and which have not yet been completely solved have been brought to the forefront of our considerations. Whereas training for commercial teachers has been available at university-level institutions ever since 1900, usually in combination with studies leading to a degree in economics (Dipl.Volkswirt), training for technical teachers was not offered at university level until early in the 1960s. This was coupled with specific entrance requirements. Completed vocational training in a recognized occupation (for example, fitter), a lower secondary school certificate, and a technical vocational school certificate (master or technician) or a technical college degree (in engineering, for example) did not suffice as qualification for matriculation. An academic secondary school certificate (Abitur) was required, and a six-month period of practical training.

The need for vocational school teachers to have acquired practical skills, which will be dealt with later on, is a problem with which all Member States must contend. The problem-solving approaches, which vary exceedingly, depend not only on the function and position of the teacher within the country's education policy but also on the country's upper secondary school structure. The vocational teacher training models vary in accordance with the degree of horizontal differentiation (occupational groups, disciplines) and vertical differentiation (apprenticeship, lower technical school, upper technical secondary school, technical college). Further differentiations are the type of vocational school for which a teacher is being trained (part-time or full-time vocational school) and the relationship between upper secondary technical level and (1) upper secondary academic level and (2) other education levels (lower secondary level, university level, and post-university level).

In all the Member States one way of coming to grips with the recognizedly difficult problem of transmitting manual skills in connection with the training of vocational school teachers appears to be a more or less pronounced vertical differentiation of the vocational teacher profession.

### 3. Verticalization of vocational teacher training: attempt to design a vocational school teacher typology

It is practically impossible to design a vocational school teacher typology which would have validity in all the Member States. There is too great a divergency with regard to teacher training entrance requirements, training stages, training institutions, official titles, and spheres of teaching activity. The Konferenz der Kultusminister — KMK (Conference of Ministers of Education of the *Länder*) issued information in 1971 according to which 34 different official titles and at least 80 different careers were involved, this in the Federal Republic of Germany alone.<sup>4</sup> If the nine Member States were taken together, these figures without doubt would be many times higher. We must therefore simplify the typography base, since otherwise a comparative analysis would bring only confusing results.

Vocational school teachers who have the task of providing vocational training of whatever nature for young people can be divided into four main groups as follows:

(a) Teachers who transmit primarily manual skills. This type of instruction takes place for the most part in laboratories, workshops, etc. Manual skills are frequently termed practical skills, but this terminology is not precise, since practice-relevant theory is also taught. Official titles are 'Lehrer für Fachpraxis', 'Werkstatt-lehrer', etc. These are teachers who transmit manual vocational skills. For the sake of simplification I shall use the term 'Praxis-Lehrer' (manual skills teacher) (L1) in this article.

Manual skills cannot be transmitted, however, without at least a modicum of theory. Every skill has a theoretical base ranging from general theoretical knowledge to knowledge of broad scientific dimension (theoretical instruction at academic level). For this reason many Member States have created a teacher type which meets this need, namely:

(b) Teachers who transmit manual skills in combination with relevant basic theory. In spite of the natural linkage of theory and practice and the resultant pedagogic *problematique*, this type of teacher is identified as such in the comparative analysis of the nine Member States only when theoretical instruction is expressly included in the tasks of the teacher. As a general rule theoretical instruction takes place in the classroom. Also typical

for this teacher type is a separation of theoretical and practical instruction, the former taking place at a workshop, the latter at a school. I shall use the term 'Praxis-Theorie-Lehrer' (manual skills-cum-theory teacher) (L2).

When there is a further separation of tasks we have the teacher who gives theoretical instruction only, with, however, a strong skills-relevant bias. We distinguish between two theory teacher types (L3 and L4), depending on the degree of subject-matter difficulty and the occupational level involved (skilled worker, assistant technician, technician):

(c) Teachers who give theoretical instruction which is directly skills-relevant and of medium-level difficulty. These teachers generally teach apprentices only. They are not employed at full-time vocational schools. The development of this teacher type can be traced back to the need to relieve manual skills-cum-theory teachers of part of their workload. I shall use the term 'Theorie-Lehrer I' (theory teacher I) (L3).

(d) Teachers who provide skills-relevant theoretical instruction at academic level. Their students are for the most part intending assistant technicians and technicians. They teach at full-time vocational schools, which in addition to leading to full vocational qualification also qualify their graduates for matriculation at an institution in the tertiary sector (technical college, university). I shall use the term 'Theorie-Lehrer II' (theory teacher II) (L4).

Teachers of category L1, L2, L3, and L4 are vocational school teachers in the narrow sense of the term. A further teacher type is often required for training leading to full vocational qualification plus university matriculation qualification (all faculties or specific faculties only), as described, above all when institutions providing this type of training are relatively autonomous *vis-à-vis* the general school system (academic secondary school) and not, as is the case in Sweden, fully integrated into a comprehensive upper secondary school system, namely:

(e) Teachers who give instruction in general subjects (L5). The subjects taught (for example mathematics, languages) are only to a very limited extent, if at all, skills-relevant.

Analysis at Member State level producing the following results:<sup>5</sup>

Teacher type \ Member State	Belgium	FR of Germany	Denmark	France	United Kingdom	Ireland	Italy	Luxembourg	Netherlands
L1	×	×	(×)	×	(×)	×	×	×	(×)
L2			×	×	(×)		×	×	
L3	×			×	(×)	×	×	(×)	×
L4	×	×	×	×	(×)	(×)	×	×	×
L5	×	(×)		(×)	×	×	×	×	

*Comments:*

(a) Belgium. From the sources available it cannot be determined whether or not theory teachers I (L3) (professeurs de connaissances professionnelles) are also responsible for the transmission of manual skills.

(b) Federal Republic of Germany. In spite of the very confusing variety of titles, training undergone, and career ladders, we can distinguish two main teacher types, namely, manual skills teacher (L1) and theory teacher II (L4). The manual skills teacher frequently teaches skills-relevant theory as well and so tends towards category L2 (manual skills-cum-theory teacher). This teacher type became increasingly necessary as the traditional German dual system of vocational training (practical training in the firm, theoretical instruction in the vocational school) began to be replaced by full-time vocational school training (full-time vocational school, basic vocational training year). Theory teachers are equipped by virtue of their educational background to give skills-relevant theoretical instruction at academic level in one discipline (for example, electrical engineering, economics) and also teach a general subject (for example, mathematics, English, sports). There is therefore no need for teacher type L5 (general subjects). Academic secondary school teachers also frequently teach at vocational schools. This classification into two main categories (L1 and L4) was the result of two skeleton agreements reached by the Conference of Ministers of Education of the *Länder* in 1973. Within each category, of course, there are a great number of variants.

(c) Denmark. The situation in Denmark is difficult to grasp, one reason being that the educational background of persons being trained as technical or commercial teachers varies considerably. This is true in other Scandinavian countries as well (Sweden, for example).

(d) France.

L1: 'Professeurs chargés des enseignements pratiques' (PTEP

and PEP); these teachers transmit manual skills to apprentices at a 'Collège d'Enseignement Technique' (CET).

L2: 'Professeurs techniques' teaching at upper technical secondary schools; these teachers transmit manual skills in workshops and laboratories and also give theoretical instruction.

L3: 'Professeurs de Collège d'Enseignement Technique' (PET); these teachers teach skills-relevant theoretical subjects in one discipline (for example, social work, mechanical engineering) at a CET.

L4: 'Professeurs des enseignements techniques théorétiques' (PETT); these teachers (academic secondary teachers of technical-theoretical subjects) teach at upper technical secondary schools. They give instruction in skills-relevant theory at academic level

(e) United Kingdom. There being as yet little formalization of vocational teacher training precisely in the case of intending vocational school teachers, manifold training opportunities are open in contrast to the few open to intending teachers in the general school system. There is consequently a practically inexhaustible number of qualification combination possibilities. Differentiation is therefore so great that it would be irresponsible to attempt a country-specific typography at this point.

(f) Ireland. Of significance is the fact that the vocational school teacher of category L4 teaches commercial subjects only.

(g) Italy. We must first distinguish between teachers at the State vocational training centres and teachers at the regional vocational training centres. As the table shows, all five categories are represented. Theory teachers II (L4) teach only at State vocational training centres. Manual skills-cum-theory teachers (L2) predominate in regional centres.

(h) Luxembourg.

L1 and L2: 'Instructeur'.

L3: 'Professeur-ingénieur diplômé'.

L5: (a) 'Instituteur d'enseignement technique et professionnel',

(b) 'Professeur d'enseignement technique et professionnel',

(c) 'Professeur-docteur'.

These teachers all give instruction in part-time and full-time vocational schools. Intending teachers of categories L5 (b) and L5 (c) receive their theoretical training abroad. All intending teachers (L1 through L5) undergo pedagogic training during practice teaching.

(i) Netherlands. Theory teachers I (L3) teach at lower- and middle-level vocational schools. Theory teachers II (L4) teach at upper-level vocational schools. On the basis of existing documentation it can only be assumed that vocational school teachers of category L1 are teaching in the Netherlands.

#### 4. The vocational school system structure as a determinant for differentiation of the vocational school teacher profession

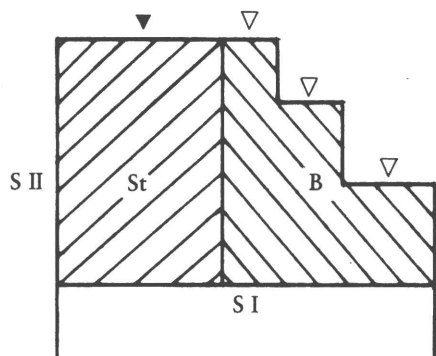
An analysis of the above findings as regards differentiation and verticalization of the profession of vocational school teacher must be restricted to a few aspects which appear to be most relevant.

(a) In all Member States we note the presence of the manual skills teacher (L1). This derives from the fact that in the vocational school system in Europe the transmission of manual vocational skills has not been left entirely to the firms. In the dual system in its purest form (practical training in the firm and theoretical instruction in the school) this type of teacher would not be required in the school, but this pure form has now been relegated to the past and was in any event dictated more by educational policy reasons than by didactic ones.

(b) Since the beginning of the 19th century similar school structures developed throughout Europe which only recently have shown signs of transformation. We now frequently find upper academic secondary schools on the one hand and a very differentiated system of part-time vocational schools, full-time vocational schools, and, intrafirm and

interfirm training centres on the other. Ideally we distinguish three models: <sup>6</sup>

Model 1

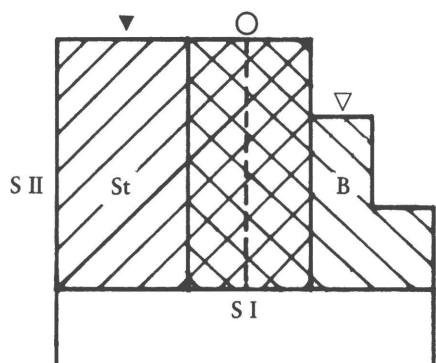


Key

- St = pre-university studies  
 B = vocational qualification  
 ▼ = university matriculation qualification (Abitur)  
 ▽ = vocational qualification (certificate)  
 S I = lower secondary education  
 S II = upper secondary education

Pre-university studies (St) and vocational qualification (B) are separated. Either a university matriculation qualification or a vocational qualification at a specific level is obtained. The educational system in the Federal Republic of Germany corresponds in general to this model.

Model 2



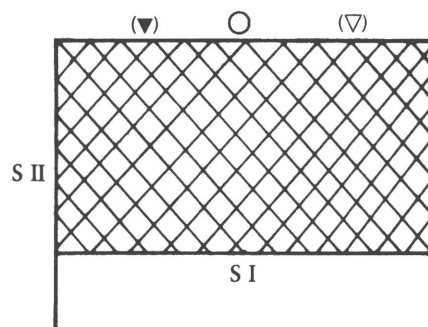
Key

- O = university matriculation qualification or qualification restricted to specific faculties plus vocational qualification certificate (double qualification)

Although pre-university studies and vocational qualification are separated as regards organization, crossover possibilities exist. Some pre-university courses contain vocational training elements and

occasionally also lead to vocational qualification certification. This double qualification can be found in many Member States. Courses of study in France, Luxembourg, Austria, and the USSR can be taken as prototypes.

Model 3



Pre-university studies and vocational training courses are integrated as regards both organization and curriculum. Double qualification is predominant, with monoqualification being the exception (prototype: academic secondary school in Sweden).

In addition to this aspect, namely, the organizational and curricular structure of upper secondary education, further aspects play a role in the curriculum design of vocational school teacher training and the resultant typification of the profession.

- (c) One aspect is the distribution of students of upper secondary schools in the general education stream and the vocational training stream. Simplifying somewhat, we distinguish two main types: countries in which about 50 % of the students are enrolled in both streams (examples are France and the Netherlands as EC Member States and also Sweden and the USSR) and countries in which 20 % of the students take general education subjects only and 50 % take vocational training subjects only (examples are the Federal Republic of Germany and the United Kingdom as EC Member States and also Austria and the German Democratic Republic); <sup>7</sup>

- (d) Another aspect is the share of full-time vocational school training in upper secondary vocational training. Here again we can distinguish a number of models: countries in which only a small percentage (10 to 20 %) of the young people attend full-time vocational schools, with the

rest undergoing vocational training within the dual system of firm plus school (examples are the Federal Republic of Germany and Ireland); countries in which from 30 to 40 % attend full-time vocational schools (Luxembourg); and countries in which from 70 to 80 % attend such schools (Belgium, France, the Netherlands, Italy). Taken as a whole, we note a growing tendency to undergo vocational training at full-time vocational schools. <sup>8</sup>

- (e) A further aspect is whether or not, and if so to what degree, the vocational training stream in upper secondary education leads to either unrestricted or restricted university matriculation qualification. The types of school which so qualify (full-time vocational school at upper secondary level, technical upper secondary school) have various names throughout Europe. After analysing these school types in all countries of western and eastern Europe, Grüner proposed that the term 'Fachoberschule' (technical high school) be used. <sup>9</sup> Although in many countries of Europe today the need to link or indeed integrate general education and vocational training is being emphasized, 'the existing structures have mastered this problem neither from the structural nor from the didactic angle as yet'. <sup>10</sup> (In France, Luxembourg, the Netherlands, and Austria solutions are in progress.)

To summarize, we can state that differentiation and verticalization of the profession of vocational school teacher is linked with the structure of upper secondary education as regards:

- the extent to which manual skills are transmitted,
- the extent to which general education and vocational training are integrated,
- the ratio of distribution of students in the general education stream and the vocational training stream,
- the extent to which training takes place in full-time vocational schools at upper secondary level,
- the extent to which vocational schools at upper secondary level prepare for university matriculation.

These aspects cannot as yet be taken as hypotheses and certainly not, in view of the current state of relevant research, as verified determinants. The standard of

educational qualification of theory teachers II (L4) and the number of such teachers required, for example, depend on whether or not technical and commercial subjects are taught at academic secondary schools (according to Rust this is the case in Scandinavian countries.<sup>11</sup>

Interlocked with these aspects of the education system which indirectly influence the differentiation and verticalization and hence the hierarchical status of vocational school teachers (title and social status) and their income are a number of factors which directly influence such differentiation, foremost of which is the educational background of these teachers.

## 5. Training of vocational school teachers

The training of the five types of vocational school teachers (L1 to L5) and also the qualifications to be met by these teachers vary considerably with regard to the following:

- requirements for admission to teacher training,
- type of teacher training institution,
- curriculum,
- quality level of final examination,
- in-firm experience.

Pedagogic qualification will be dealt with separately. These factors cannot be dealt with here in detail and certainly not in detail at country level. Only a few

generalized analyses can be attempted. Theory teachers II (L4—L5), who are all university graduates, teach for the most part at full-time vocational schools (middle and upper level) whereas theory teachers I (L3), who have graduated from technical schools, colleges, institutes, etc., give instruction primarily to apprentices. Manual skills teachers (L1) have usually undergone training as intending master or technician. In some countries all these teachers also teach in the continuing education sector. Examples are the German Democratic Republic and Great Britain, where continuing education in upper secondary schools is more closely linked to continuing education at post-university level than is the case in many other countries of Europe.

Required educational background of vocational school teachers

Teacher type	Background	Upper secondary school certificate		Completed vocational training	Several years of in-firm experience	Technical school diploma	Technical college diploma	University degree
		Lower secondary school certificate	no Abitur					
L1	×		(×)	×	×	(×)		
L2	×		(×)	×	(×)	×	(×)	
L3	×		×	(×)	(×)		×	(×)
L4	×		×	(×)	(×)		×	×
L5	×			×				×

The sign × indicates minimum requirements; (×) indicates that there is considerable requirement variation from country to country.

The sign x indicates minimum requirements; (x) indicates that there is considerable requirement variation from country to country.

Distribution of tasks in line with the verticalization of vocational school teacher training does raise problems, since as a result the highly praised unity of theory and practice which characterizes the vocational training curriculum, can become greatly endangered. It is for this reason that in many countries theory and manual skills are now combined within one and the same teacher training (L2).

The need for vocational school teachers to have mastered relevant manual skills implies that they must be equipped to give instruction both in the classroom and in the training firm. It can no longer be required of the teachers of all five types that they have a qualification as skilled worker, not to mention technician or master. What can be required is that in addition to having mastered basic manual skills they have been familiarized with the working world of their students, in particular with in-firm training shops and the position of the relevant economic branches within the overall economy.

## 6. Pedagogic qualification

Traditionally theory teachers at upper secondary school level are required to have majored at university in the subjects they are teaching. However defensible this demand may be (academic secondary school teachers and theory teachers II teaching vocational subjects meet this requirement), the danger of paying too little attention to career aspects and career ethos does exist. Pedagogic qualification then very easily tends to be neglected. This danger is even increased when university graduates in engineering, economics, or agriculture who have no pedagogic qualification are employed as theory teachers, a widely prevalent practice in countries of western and eastern Europe. Many of these countries, for example, Italy, Belgium, Ireland, and also Poland, have now had to admit that this practice has indeed its negative side. Only via pedagogic qualification at evening or day courses or through correspondence courses available in many countries to these teachers can this situation gradually be improved. The European Community recommends that efforts in this direction be increased.<sup>12</sup> From the federal German standpoint the significance of such measures can be grasped

only when it is realized that vocational school teacher training at university level (L4), which includes pedagogic qualification, is seldom met with in countries of western Europe. In eastern Europe the only exceptions are Hungary and the German Democratic Republic. In recent times this teacher training model has been the subject of discussion in many countries, and in some instances the model has already been adopted.

In the Federal Republic of Germany most of the universities training vocational school teachers provide pedagogic qualification as follows:

- instruction in the following subjects (constituting from 10 to 30 % of the entire course of study): educational science, occupational pedagogy, sociology, psychology, didactics, methodology, and political science;
- four weeks of class auditing in vocational schools.

The four-year course of study at the university is followed by a period of practice teaching (one-and-a-half to two years).

By comparison the pedagogic training of vocational school teachers in many



European countries leaves much to be desired both quantitatively and qualitatively. We distinguish four main models:

- no pedagogic qualification whatsoever (Italy);
- pedagogic qualification during university study (pre-service training, initial training) (for example Austria, Switzerland, Federal Republic of Germany);
- pedagogic qualification after university lasting from six months to two years (for example Denmark, the Netherlands, France, Great Britain);
- various organizational types of pedagogic qualification during teaching (in-service training).

The impression should, however, not be gained that the training of vocational school teachers in the Federal Republic of Germany is beyond criticism. There is, first of all, the danger of overemphasizing the university type of vocational school teacher training and thus taking too much of an academic approach to vocational training. It is for this reason that the largest teachers' union in France (SNETAA) has opposed transferring the training of theory teachers I (L3) to the universities.<sup>13</sup> Closely related to this problem is another problem, namely, the difficulty of combining university level qualification (four years following completion of academic secondary school) with practical in-firm experience. Theory teachers II (L4) have usually had very little contact with the working world. In the Federal Republic of Germany it has now become very difficult for operatives (technicians, masters) who do not possess an academic secondary school certificate to become vocational school teachers. In most European countries, on the other hand, access to teacher training is not so rigid.

Further problems in connection with the training of vocational school teachers such as the number and type of vocational school teaching subjects, one-phase or two-phase approach, etc., cannot be dealt with here.

## 7. Future development

In closing I should like to briefly discuss a few aspects in connection with the improvement of vocational school teacher training. Certainly no effort should be made to standardize teacher training and vocational school teaching assignments. At a symposium held in 1976 Guido Brunner, Member of the EC Commission in charge of energy, research, science and education, spoke as follows: 'If the people of Europe really want to create a European federal State they must come to know one another better, they must exchange ideas and information, they must learn to think beyond national borders. And here we have a natural point of approach for our work, I refer to mobility'.<sup>14</sup> This approach was also mentioned in the Treaty of Rome of 25 March 1957 establishing the European Economic Community. In accordance with Article 128 (general vocational training principles) it is the task of the Council to establish general principles 'for the implementation of a common policy of occupational training capable of contributing to the harmonious development of both national economies and of the Common Market'.<sup>15</sup>

In the course of implementing the Treaty of Rome the Regulation on the establishment of general principles for the implementation of a common occupational training policy of 2 April 1963 provided the basis for the harmonious development of both the national economies and the vocational training system. In 1973, however, the Dahrendorf memorandum stressed that a harmonization of the European educational system, its structures and teaching content did not appear to be 'either realistic or necessary'.<sup>16</sup> The concept of harmonization has now been replaced by the strategy of convertibility of diplomas and other qualifications<sup>17</sup> in the interest of arriving within the EC at the greatest possible degree of geographical mobility, even though the mobility of workers

within EC Member States is not of particular significance at present as far as quantity is concerned.<sup>18</sup>

For certain professions such as teacher more so than for other professions (for example engineer, physician, skilled worker) and specifically for vocational school teachers the principle of mobility is linked to a number of preconditions which, although they do not aim precisely at standardization, should make comparability possible in spite of the great variety of types and differences within types:

- requirement governing admittance to teacher training: at least completed upper secondary schooling with either a vocational training certificate (L1, L2, and L3) or an academic secondary school certificate (L4 and L5);<sup>19</sup>
- in-firm experience: period of practical training of at least one year's duration for all vocational school teachers, preferably also for vocational school teachers at lower secondary school level so that they can properly prepare their students for entry to the working world, career selection, and vocational training;<sup>20</sup>
- pedagogic qualification: obligatory study of educational science and social science subjects (and not only didactics and methodology) during university study (L3, L4, L5) and also educational science and social science propaedeutics during technical school training (L1, L2);
- pre-service training for all teachers;
- provision and improvement of continuing education opportunities for all teachers;
- promotion of vocational training research and establishment of vocational training research institutes at universities.

Understanding is requested for the rather general approach taken in this article. However, the current state of comparative research on the training of vocational school teachers does not permit treatment in greater detail.

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# In-firm trainers in the Federal Republic of Germany — tasks, training, continuing training

Report of the Bundesinstitut für Berufsbildung  
(Federal Institute for Vocational Training)<sup>1</sup>

Herbert Tilch

## Summary

In-firm vocational training trainers, in short trainee trainers, belong to that group of teachers who prepare young people for their first vocational training qualification. These trainers are not teachers by profession. They are operatives of firms in both the private and the public sector, in small firms frequently also owners and managers.

The legal bases of in-firm vocational training are for industrial occupations the *Berufsbildungsgesetz* (Vocational Training Act) of 1969 and for craft occupations the *Handwerksordnung* (Crafts Code). This legislation requires that in-firm trainees also spend a specific period of their training time in part-time vocational schools, usually run by public authorities. In the Federal Republic of Germany this dual system is the main instrument of vocational training.

Both professional and pedagogic qualifications must be met by over 500 000 trainee trainers, including those master craftsmen who train trainees. Most of the trainee trainers give instruction only on a part-time basis, the rest of their working hours being devoted to their specific tasks in the firm.

Professional qualification is obtained on the basis of a final examination (for example, master craftsman examination) plus in-firm experience.

For some years now standardized regulations have also governed pedagogic qualification for instruction in the various recognized skilled occupations. Pedagogic training is undergone either as a part of the training leading to a master

craftsman certificate or in special courses leading to a trainer aptitude certificate. Alongside this initial pedagogic qualification the continuing pedagogic training of trainers is gaining in importance. The German Federal Government is active, for example via the establishment of a trainer training centre, in promoting this development in the interest of upgrading the quality of trainee training and thus improving vocational training under the dual system.

## 1. Introduction

Trainee trainers discharge an important vocational training task in the Federal Republic of Germany. They train young people who, after having completed at least nine or ten years of schooling, desire to undergo practice-oriented vocational training in a firm. This educational stream can look back on a long tradition in Germany which reaches back to the apprenticeships of the Middle Ages and which for a long time determined vocational training in crafts and commercial trades. Today it still constitutes the most important instrument of vocational training in the Federal Republic of Germany. The large majority of intending young workers in the Federal Republic of Germany choose this type of vocational training (see Figure 1), known as the dual system. In 1978 602 000 young people started their vocational training within the dual system.<sup>2</sup>

Characteristic for the dual system of vocational training is the content-specific and temporal linkage of predominantly

practical training in the firm with predominantly theoretical instruction in a part-time vocational school, the latter attended usually one or two days a week for from eight to twelve class contact hours. The practice of providing full-time theoretical instruction for several weeks at a time on the basis of block release from the firm is now becoming increasingly frequent.

Most of the training time, namely, from three to four days a week, is taken up with in-firm training. Young people who undergo dual-system vocational training, which generally lasts from three to three and a half years, are thus trained in the firm by trainee trainers<sup>3</sup> and taught in the part-time vocational school by vocational school teachers. In other words, they have two learning sites.

The trainee trainers constitute one part of the teaching and training personnel engaged in providing vocational training under the dual system. In 1977 there were a total of *circa* 72 000 teachers teaching at part-time vocational schools, the number of trainee trainers was estimated at over 500 000, and approximately 1.4 million young people were undergoing training within the dual system. It must be borne in mind, of course, that most of the trainee trainers have job tasks in the firm in addition to their training task.

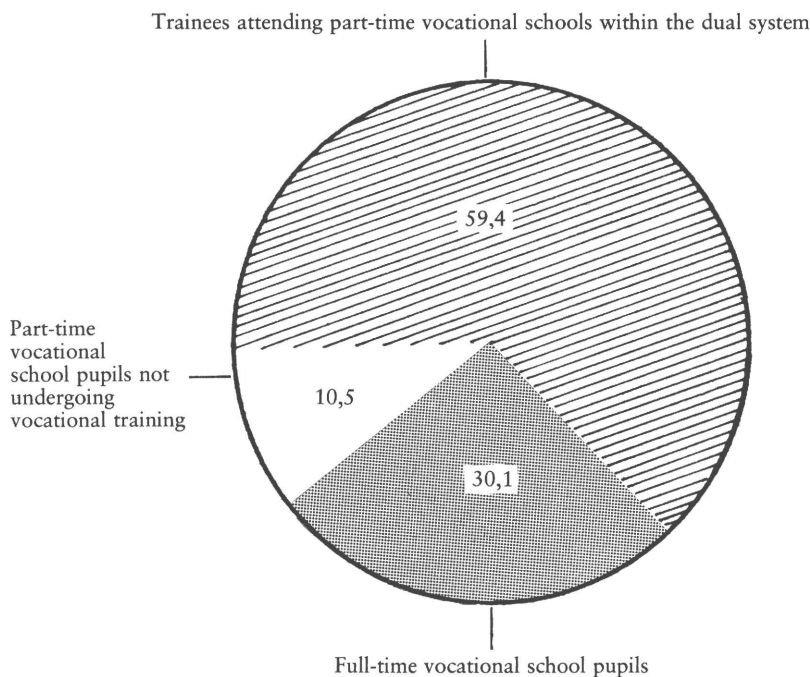
These statistics clearly illustrate the very important role played by in-firm vocational training and trainee trainers in the vocational training system of the Federal Republic of Germany.

<sup>1</sup> This report is based on a study on this subject matter undertaken by B. Braeuer, K. Kutt, W. Schulz, R. Selka and H. Tilch.

<sup>2</sup> A brief description of vocational training in the Federal Republic of Germany as of May 1977 is provided in the Federal Republic of Germany Supplement to the EC Vocational Training Information Bulletin, 1978.

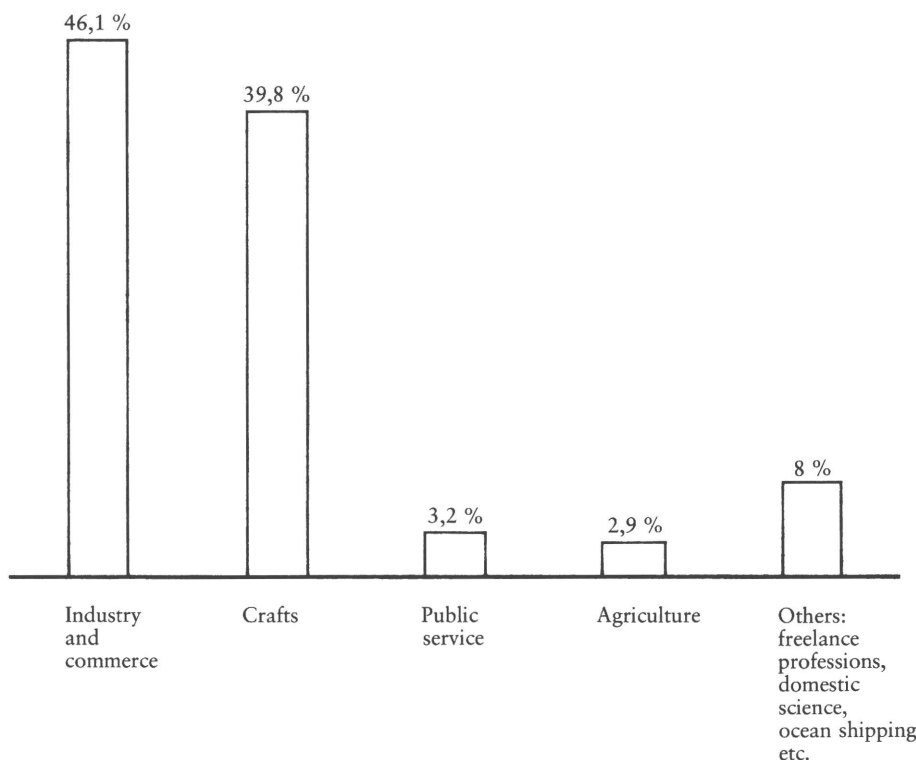
<sup>3</sup> In small and medium firms of the crafts sector master craftsmen rather than trainee trainers frequently provide training. Although they generally do not think of themselves as trainers, they have been included in this group in this analysis.

**Figure 1**  
**Distribution of pupils at vocational schools**  
 (1976, in percent)



Source: Der Bundesminister für Bildung und Wissenschaft: Grund- und Strukturdaten 1978 (Federal Minister for Education and Science: basic and structural data, 1978).

**Figure 2**  
**Distribution of trainees according to training sectors, 1977**



Source: Der Bundesminister für Bildung und Wissenschaft: Berufsbildungsbericht 1979 (Federal Minister for Education and Science: Vocational Training Report, 1979).

Attention will now be directed to the tasks, functions, and training of trainee trainers and the legal bases, organization, and types of in-firm vocational training.

The legal bases for in-firm vocational training are for industrial occupations the Vocational Training Act of 1969 and for the crafts, the Crafts Code. Under this legislation vocational training for the various recognized skilled occupations is standardized. In addition specific training regulations for each trainee occupation have been issued by the German Federal Government. At the present time training regulations exist for 452 recognized skilled occupations.

Most of the trainee occupations fall within the industrial, commercial, and crafts sectors, with the number of trainees in the industrial sector dominating percentage-wise (see Figure 2). Most of the trainers provide training in these sectors. It is therefore justifiable to often place emphasis on these trainee trainers in the following text.

## 2. General tasks of the trainee trainers

The Vocational Training Act and the Crafts Code stipulate the general objectives of vocational training, the tasks of the trainee trainers, and the minimum qualification requirements which these trainers (respectively master craftsmen) must meet in order to transmit in-firm training.

The objective of vocational training is to provide young people within the framework of a systematically organized course of training with broad basic training and the knowledge and skills required for the practice of a recognized skilled occupation. The objective of vocational training is furthermore to make possible the acquisition of on-the-job experience and provide the basis for continuing training which paves the way for career advancement and adaption to technical, economic, and social development.

In line with this objective a great deal of effort goes into the development of vocational training provisions which stipulate what knowledge and skills are required for each specific recognized skilled occupation and identify the content-specific and temporal framework for the transfer of such knowledge and skills. The firms nevertheless retain a considerable margin

of play within which to organize and provide in-firm training under their own responsibility. Each firm and each trainer must see to it that their trainees acquire the knowledge and skills required to achieve the respective training goal.

It is therefore the duty of the trainers to plan, conduct, and supervise training in the firm and to appraise and evaluate the performance of the trainees. Intermediate and final examinations are conducted outside the firm in accordance with standardized examination regulations.

### 3. Who is a trainer? Minimum qualification requirements

In contrast to that of teacher, the concept of trainer is still not clearly defined. Not everyone who works with a trainee in a firm is a trainer. The firm decides who is to be trainer since neither in the Vocational Training Act or in any other legislation is this matter dealt with. It can, however, be assumed that the following qualification requirements apply to persons who are directly and responsibly involved to a considerable extent with the in-firm training of young people. It should first be mentioned that this unclear concept of the trainee trainer is one of the reasons why the total number of full-time and part-time in-firm vocational training trainers is not known precisely. Unknown above all is the number of persons who occasionally discharge small training tasks delegated to them by a trainer.

Although it has not yet been officially stipulated who trainers are, those who do train must meet specific minimum requirements. A trainer must be equipped with the necessary professional and pedagogic skills and be personally suited for the job. Requirements vary according to the training sector involved (see Table 1). Common to all sectors is the requirement that the trainer must have full vocational qualification and considerable in-firm experience. Particularly with regard to trainers for occupations in the industrial, commercial, and crafts sectors there are close links between the completed vocational training of the trainer and the occupation for which he provides training. Completed vocational training is also required of persons preparing for the master of industry examination or the master craftsman examination.

Table 1

Minimum professional and pedagogic qualifications required of trainee trainers classified according to training sector

Training sector	Minimum requirements
Industry and commerce	Final vocational training certificate (professional qualification) and pedagogic qualification (trainer aptitude certificate)
Crafts	Master craftsman certificate
Public service	Final certificate or equivalent qualification (public officers) and pedagogic qualification (trainer aptitude certificate)
Agriculture	Master craftsman examination or equivalent and trainer aptitude certificate
Freelance professions	Admission to private practice as lawyer, physician, druggist, etc. (university degree)

Other certificates can be recognized as well. For example, the master craftsman is entitled to train trainees in the relevant industrial occupations. Persons with a university degree who have also mastered a craft may provide training in this craft.

Pedagogic aptitude is determined via either a master examination or a trainer aptitude examination.

In order to provide trainee training in a freelance profession (lawyer, physician, dentist, druggist, tax consultant, certified public accountant), possession of the relevant university degree suffices. Specific pedagogic training is not required.

Not personally suited are persons who violate legal regulations governing the training and the employment of young people, for example by giving a trainee work to do which is dangerous, endangers health, or which is to a large extent extraneous to the training goal.

As a general rule trainers must be at least 24 years old. The Vocational Training Act and the Crafts Code lay down that only those persons may train in-firm trainees who are professionally and pedagogically qualified and that the firm must be suited and properly equipped to provide in-firm vocational training. The following remarks with regard to the training firms may help to clarify the vocational training situation in the training sector of industry and crafts.

Only a minority of the industrial and craft firms function also as training firms. In the industrial sector they account for about one-third of the total number of firms. It is mainly the large firms which provide in-firm vocational

training. About 45 % of all young people learning industrial occupations are being trained in firms employing more than 1 000 workers whereas only 6 % are undergoing training in firms employing from 10 to 49 workers. In the traditional crafts sector, by contrast, the majority of training firms have no more than 50 workers at the most on their payroll.

The number of firms which are not considered suitable as training firms is far less than the number of firms not offering in-firm vocational training. The preconditions for qualified training are frequently better in large firms than they are in small ones.

The trainee trainers are either operatives of a firm or, above all in small firms, firm owners and managers. In the crafts sector the master craftsman frequently trains in-firm trainees.

### 4. Functions of the trainer and organization of training

In-firm vocational training seldom takes place at only one workplace. Particularly in large firms it is undergone at a number of workplaces in accordance with a carefully planned training schedule. Large firms often maintain training workshops for their trainees in which instruction is provided exclusively by trainee trainers. Young people undergoing a technical traineeship in such a firm spend up to one year in the training workshop before being assigned to production workplaces in the firm.

For the most part, however, in-firm training takes place exclusively at pro-

duction workplaces, with emphasis being placed more on on-the-job practice than on instruction. Instruction at the workplace is generally left to experienced workers of the firm, who thus discharge a training function without actually being trainee trainers in the narrow sense of the term. This instruction at the workplace is usually coordinated and supervised by a trainee trainer.

Taken as a whole, trainee trainers do not constitute a unified group. The main distinguishing characteristic is the varying volume of training work undertaken. Most of the trainee trainers discharge training functions in addition to their regular job functions in the firm. In fact, about 90 % of the trainers fall in this category, with the actual time spent in training trainees varying considerably. The large majority devote less than one-quarter of their working time to training. The remaining 10 % of the trainee trainers, most of them working in industry, for the most part devote all their time to training.

Full-time trainers usually work in firms in which in-firm vocational training plays a large role and is specially structured. They are therefore to be found above all in firms employing more than 500 workers.

In firms employing a number of training personnel a distinction is made between trainee trainers, training masters (in the technico-industrial sector), and training managers. Training workshop foremen, group leaders, and coordinators are to be found in large concerns which have a number of branch firms.

Full-time trainers spend most of their time giving instruction in the training workshop but also give theoretical instruction in the firm and coordinate production workplace training. If they have management tasks or carry responsibility for training in laboratories or workshops, they frequently have the status of training master.

Training managers discharge management and coordination functions, provide a certain amount of trainee training, and frequently assume responsibility for the continuing training of firm employees and the continuing pedagogic training of the trainers. In the commercial sector the practice is spreading of giving all full-time trainers the status of training manager whereas in the industrial sector training managers often have 100 or more trainee trainers working under them.

When we examine the tasks and the structuring of in-firm vocational training in greater detail, the possibilities and limitations of planning and the distribution of the tasks and functions of trainee trainers in large firms become more clearly delineated.

An empirical analysis undertaken by the Bundesinstitut für Berufsbildung (Federal Institute for Vocational Training) has shown that there is a relatively high degree of autonomy with regard to in-firm training tasks relating directly to the counselling and training of young people. The executive management of the firm takes decisions with regard to the number of in-firm trainees, the number of trainee trainers and the selection of training places and also decides in matters concerning the modality of financing in-firm vocational training.

Decisions in connection with the development of in-firm training plans and plans for the coordination of training at the various workplaces are generally taken by those employees who are directly responsible for training. The analysis revealed that in such decisions the training managers have much more say than do the trainee trainers or the training masters (in the industrial sector). As stated, decision as to the number of trainees to be taken on rests for the most part with the executive management. However, training managers and in small firms trainee trainers very frequently have considerable right of say in this matter.

With regard to the provision of funds for the training of trainees and the employment of additional trainers, the trainers may bring forward proposals and thus play a role in the planning process. In general, however, it can be said that in the matter of planning in its various forms in-firm vocational training is to a very large degree dependent on decisions taken at other decision levels of the firm.

Nearly all the training personnel are involved in the task of appraising the performance and the progress of the trainees. Most of the trainers have their own system of appraisal. In the United Kingdom, however, most of the training firms have standardized performance appraisal sheets.

Functions relating to in-firm continuing training and non-firm functions relating to vocational training are discharged by trainee trainers and training managers. Many trainee trainers and training managers, for example, function as members of a board of examiners set up

by the respective chamber of industry and commerce, chamber of crafts, or other competent body to conduct intermediate and final examinations in the field of vocational training under the dual system.

## 5. Professional qualifications of trainee trainers

In the Federal Republic of Germany there are as yet no established courses of training for in-firm vocational training trainers such as exists for vocational training teachers, for example. A certain degree of uniformity as to qualifications does exist as the result of the legally established minimum qualification requirements mentioned above. Although very little data is available on the actual situation with regard to such courses of training, there is data available on the professional qualifications of serving trainee trainers.

Results obtained from studies on the situation of trainee trainers in the firms led to the conclusion that most of these trainers decided rather late in their own training to become trainers. It is of course important to bear in mind that in recent years the profession of trainee trainer has become increasingly attractive. This has led many older firm employees in the field of production and management to decide to take up this profession.

The career ladder of trainee trainers for technico-industrial occupations usually leads from completed vocational training and several years of job experience as a highly-skilled operative on to a post as trainee trainer. On average every second trainer has acquired additional qualification as technician, master craftsman, or master of industry. Training managers usually have a higher level of school education than trainee trainers have. They also have on average a higher level of professional qualification. About 40 % of all training managers have a university degree. About 40 % have also acquired qualification as technician, master craftsman, or master of industry. With regard to personnel providing training in commercial occupations the difference in qualification level between trainee trainers and training managers is less pronounced. Advancement from trainee trainer to training manager is easier. However, the post of training manager is frequently of less importance. Also in the case of personnel providing training in commercial occupations there is a decided trend towards the acquisition of additional qualifications.

## 6. Pedagogic training of trainers

It has long been realized that the quality of in-firm vocational training of young people is to a high degree dependent on the pedagogic qualification of the trainers. The master craftsman examination, for example, has for over 50 years now included test questions relating to occupational pedagogy. In addition, a number of larger firms and organizations in the private sector conduct courses which transmit pedagogic skills to trainee trainers. In the past attendance at such courses was voluntary and course subject-matter varied considerably.

The subject content of examinations leading to professional and pedagogic qualification has now been to a large extent standardized by legal regulations governing trainee trainer aptitude examinations, master craftsman examinations, and master of industry examinations. The pedagogic knowledge and skills relate to varying aspects of trainer training and involve a number of disciplines.

The required subject content can be divided into four groups as follows:

### 1. BASIC ASPECTS OF VOCATIONAL TRAINING

- (a) Tasks and objectives of vocational training within an educational system characterized by individual and social right to equality of opportunity, mobility and career advancement, individual and social role of work input and work performance relationships between vocational training and the labour market;
- (b) The role of training firms, suprafirm training centres, and vocational schools as learning sites within the vocational training system;
- (c) Task, role, and responsibility of the trainee and the trainer.

### 2. PLANNING AND IMPLEMENTATION OF VOCATIONAL TRAINING

- (a) Training content, training sector, skeleton training plan, examination regulations;
- (b) Didactic preparation of training content:
  - determination of learning goals, organization of training;
  - establishment of time schedule for theoretical instruction periods and in-firm training periods,

selection of in-firm and suprafirm training places, establishment of in-firm training plan;

- (c) Cooperation with the vocational school, career guidance officers, and training counsellors;
- (d) Training methods and learning processes:
  - training methods, in particular instruction and exercises at the workplace, discussions with trainees, demonstration of training processes;
  - training materials;
  - learning aids;
  - performance appraisal.

### 3. THE YOUNG PERSON UNDERGOING VOCATIONAL TRAINING

- (a) Need for and importance of youth-relevant vocational training;
- (b) Performance profile, capabilities, aptitude of trainees;
- (c) Characteristics typical of the process of growth and personality development of trainees, motivation and behaviour, group psychology behaviour;
- (d) In-firm and non-firm environmental influences, social and political behaviour of young persons;
- (e) Dealing with trainees who are difficult to handle;
- (f) Health care for trainees, including guarding against occupational diseases, monitoring of performance curve, and accident prevention.

### 4. LEGAL PROVISIONS

- (a) Main provisions of the Basic Law, the respective *Land* constitution, and the Vocational Training Act and Crafts Code
- (b) Main provisions of labour law, social law, labour protection legislation, in particular legal provisions with regard to the work contract, the works council, wage rates, promotion of training, protection of young people in public places, and accident prevention;
- (c) Legal relations between the trainer and the trainee.

In general persons intending to sit for the trainee trainer aptitude examination need not have completed a specified course of training. Preparation may be through self-study, participation in a relevant correspondence course, or attendance at any one of a number of special courses offered by various organizations in the private sector and by educational insti-

tutions. Part of the course of training leading to the master of industry or master craftsman certificate is devoted to occupational pedagogy, with attendance being mandatory under the examination regulations.

The former Federal Committee on Vocational Training<sup>1</sup> issued a special recommendation concerning the content-specific, time-schedule-specific, and methodology-specific design of pedagogic training courses for intending trainers. This recommendation is not binding on the organizers of such courses but it does serve them as a planning guide. These courses should entail at least 120 hours, but preferably 200 hours of instruction.

In order to provide course organizers with additional decision-aids and recommendations and to make it possible for trainers without pedagogic qualification to prepare as rapidly as possible for the trainee trainer aptitude examination, the German Federal Government encouraged and promoted a number of pilot projects.

The first project was a trainer training course consisting of a media package involving a series of television broadcasts, flanking study material, and flanking study courses.

Since 1973 a number of pilot training courses have been developed in cooperation with organizations involved in vocational training. Parallel research studies have been conducted on course design from the point of view of content, methodology, and organization. The lesson has been learned that from the standpoint of the trainee trainer participation in a course is by far the best way of preparing for the trainee trainer aptitude examination.

A great many trainee trainers who have been serving for many years in this capacity or who have acquired pedagogic knowledge skills elsewhere have been recognized as having pedagogic qualification without having to sit for the examination. The situation with regard to trainers in the industrial sector is illustrated in Figure 3. Only a small per-

<sup>1</sup> Since 1976 the Bundesinstitut für Berufsbildung — BIBB (Federal Institute for Vocational Training) has taken over the task of advising the German Federal Government in Vocational training matters formerly discharged by the Bundesausschuß für Berufsbildung (Federal Committee on Vocational Training).

tage of trainers have not yet met the pedagogic requirements.

Under the trainer aptitude regulations the aptitude examination must consist of two parts, one oral and one written. The written examination is to last five hours and involve written assignments, completed under supervision, on planning and implementation of vocational training, the young person undergoing vocational training, and legal provisions.

The oral examination is to cover the four main groups mentioned and last half an hour. The examinee must also do a stint of practice instruction.

In the industrial sector chambers of industry and commerce and in the commercial sector chambers of crafts conduct the examinations. Although these examinations are not conducted by the State, they are comparable with State examinations by virtue of the fact that they are regulated by legal provisions, including examination regulations.

The respective chambers each set up a board of examiners consisting of at least three members. Employers and employees must have parity representation on the board and at least one vocational school teacher must be a board of examiners member.

An enquiry was conducted which covered roughly 900 trainers in the industrial sector, most of them training on a full-time basis. They were asked whether or not they had participated in continuing training courses and events. Results showed that by far the most of them—in the United Kingdom practically all of them—had done so.

If we classify the continuing training courses or seminars provided for trainers according to subject matter offered, we arrive at the figures given in Table 2. The first group comprises organizational and technical subjects, the second pedagogic subjects in the broad sense of the term. Of a total of 3 500 courses and seminars roughly 80 % fall under the second group. Although this comparison does not take the duration of course or seminar into account, it nevertheless clearly highlights the emphasis given to pedagogic continuing training *vis-à-vis* technical and managerial continuing training for trainers. It must of course be borne in mind that most of the trainers have already completed their professional training, so that pedagogic continuing training can be tailored directly to preparation for the aptitude examination.

With regard to the pedagogic subjects the comparison revealed that the trainers were especially interested in the following topics:

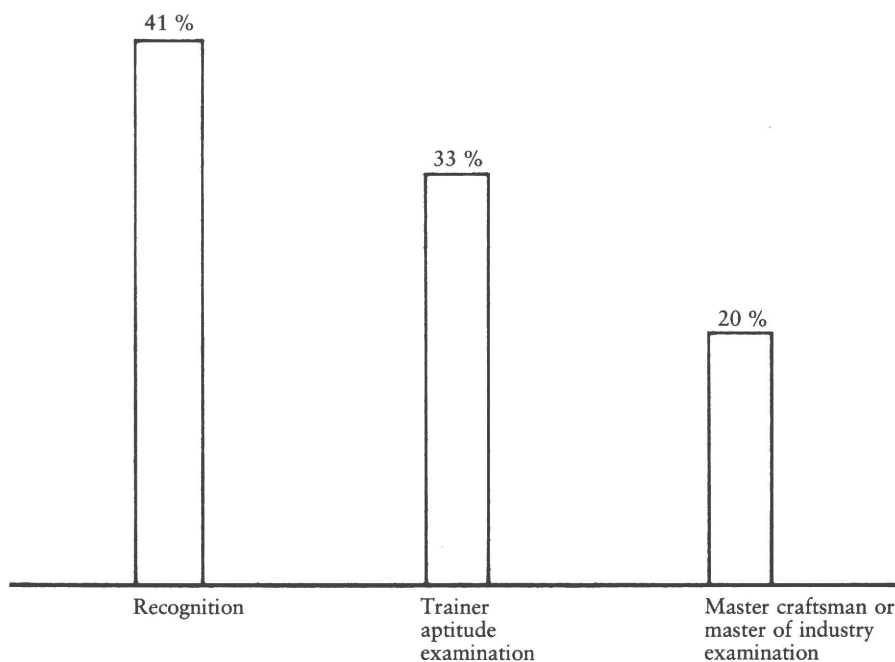
- information on new training regulations,
- coordination of training in the firm and instruction at the part-time vocational school (dual system),
- setting up of in-firm training plans,
- techniques of practical instruction provided during in-firm training,
- selection, compilation, and use of training materials,
- learning problems of young people, causes and corrective measures,
- learning progress control and appraisal of in-firm trainee performance,
- technical problems involved in transmitting new technologies to in-firm trainees.

It is evident that those topics stand in the forefront of interest which are directly connected with the actual training tasks of trainers and that not only pedagogic but also technical subject content is of importance.

Continuing training in managerial, organizational and technical subjects is provided not only by training firms but also by competent associations and organizations in the private sector. Continuing training in pedagogic subjects is

Figure 3

Pedagogic qualification of trainee trainers in the industrial sector



## 7. Continuing training of trainers

Pedagogic training is now recognized as a benchmark in the training of trainee trainers. Intending trainee trainers are now obliged to sit for a pedagogic aptitude examination (either the trainer aptitude examination or one part of the master craftsman or master of industry examination).

Of considerable importance now is the question of how to best provide the large group of trainers who need not take a pedagogic aptitude examination, having either received recognition of pedagogic qualification or undergone basic pedagogic training, with support and assistance in their work and in the

further development of vocational training. The borderline between training and continuing training is not clear mainly because in the meantime most of the full-time trainers already have high-level vocational qualifications and furthermore no regulations providing for standardized continuing training exist.

In view of the numerous functions and differences in the various trainer groups, the greatly diverse recognized skilled occupations, and developments in the various sectors of private and public enterprise, continuing training courses must in the main be geared very closely to the training needs of specific trainer groups. In this connection the exchange of experience at in-firm and suprafirm level is acquiring growing importance.



Table 2

Subject emphasis of continuing training events provided for trainers

Subject emphasis	Number of courses	%
Management	112	3
Technical course	102	3
EDP	99	3
Production processes	92	2
Work organization	85	2
Electronics	43	1
Administration streamlining	34	1
Personnel management	411	11
Instruction techniques (general)	338	9
Appraisal of trainee performance	318	9
Legal bases of training	307	8
Youth psychology/sociology	303	8
Learning psychology	272	7
Labour protection and accident prevention	269	7
Organization of training	255	7
Instruction techniques (occupation-specific)	214	6
Rhetoric	191	6
Others	258	7
Total	3 703	100

usually provided by the chambers of industry and commerce respectively the chambers of handicrafts.

A trainer training centre has now been established in which pedagogic continuing training models are to be tested. The centre furthermore provides organizers and personnel involved in trainer training with support and assistance in their efforts to improve the pedagogic qualifications of trainers in the interest of stimulating the further development of vocational training under the dual system.

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# Cooperation between schools and firms

by *Ady Kieffer*<sup>1</sup>

## The Chamber of Crafts

The Chamber of Crafts is an institution under public law and an official organ constituted on an elective basis. Like the other professional chambers in the Grand Duchy of Luxembourg, the Chamber of Crafts was founded by legislation to that effect adopted on 24 April 1924 and was known as the Chamber of Artisans until 1945. Its statutes were modified by the Grand Ducal Decrees of 8 October 1945 and 31 December 1960 respectively and the law of 21 December 1973. The principal task of the Chamber of Crafts is to safeguard and defend the interests of those individuals occupied in some several thousand small and medium firms.

In addition to the general attributes conferred upon all the professional chambers, the Chamber of Crafts was called upon in particular as follows:

'To dedicate itself in close cooperation with the professional associations to the improvement of the occupational and social situation of craftsmen, the safeguarding of their interests, the promotion of their activities, the consolidation of honourable professional conduct, the guaranteed promotion and application of legislation regarding the crafts sector, the improvement of personnel training, the improvement by way of appropriate consultancy of the equipment of craft workshops, the provision of consultancy services, the formulation of complaints, and the commissioning of surveys and other statistical exercises and the undertaking of the same with the approval of the relevant departments. To this effect the Chamber of Crafts will establish or, where appropriate, subsidize any establishment, institution, organization or any other service pursuing this objective and will submit appropriate proposals for legislation.'

The Chamber of Crafts is endowed with the right to submit to the Luxembourg Government proposals for legislation

which the latter must examine and in turn submit to the Chamber of Deputies in those matters for which the Chamber of Deputies is competent.

The opinion of the Chamber of Crafts must be sought in all matters which principally affect craftsmen and are to be made the subject of a law, a ministerial decree, or a Grand Ducal decree.

Other pieces of legislation stipulate that the Chamber of Crafts shall 'Ensure that legislation concerning apprenticeship, vocational training in the craft occupation, and the establishment of craftsmen be strictly observed. It shall hold qualifying examinations for qualification as master craftsman within the framework of the corresponding provisions.'

The Chamber of Crafts shall make proposals as regards the supervision of vocational training for craft occupations and participate in the execution of such supervision.'

In order to underline the importance of the role attributed from the outset by the legislating bodies to a professional chamber to specialize in the crafts sector, the Council of State in its paper of 11 February 1921 on the proposed legislation to establish professional chambers noted the following:

'There is a general desire to make a serious effort to upgrade the craft sector, the prosperity of which is essential to the public good. It is in the first instance apprenticeship and other vocational instruction which will be the subject of sustained initiatives on the part of the future Chamber of Artisans.'

If the true impact of the role which the Chamber of Crafts fulfils in vocational training is to be properly appreciated, it must be borne in mind that this professional chamber at present has registered with it some 4 200 firms, a substantial figure when viewed in the light of the number of firms belonging to the other sectors of the economy, e.g. commerce, agriculture, industry. The impact of the

activities of the Chamber of Crafts can however best be assessed in the light of the fact that the crafts sector remains the principal training agent of a skilled labour force which is occupied not only in craft enterprises but also in both the public and private branches of the other economic sectors. It is furthermore true that the number of individuals pursuing a craft occupation exceeds that of those employed in the iron and steel industry — the nation's principal industry — and accounts for some 18 % of the working population, and also true that in recent years the number of apprenticeship contracts registered at the Chamber of Crafts has increased substantially.

It should be recalled that one of the principal orientation roles in the policy pursued by the Chamber of Crafts is the continual improvement of the opportunities and conditions of training with a view to raising the level of the professional qualification of apprentices and masters and rendering more attractive access to and the pursuit of a craft occupation. Towards this end a variety of measures and activities have been undertaken and a wide range of institutions and organizations established.

## Cooperation between schools and the professional milieu

The principle of cooperation between the schools and the professional milieu is anchored in a number of pieces of legislation. The Grand Ducal decree of 8 October 1945 amending a law of 5 January 1929 on apprenticeship introduced a number of provisions stipulating the nature of such cooperation. A number of these provisions were subsequently amended by supersessive legislation and regulations, in particular by the law adopted on 21 May 1979 on the organization of vocational training, the establishment of technical secondary education, and the organization of continuing vocational training.

<sup>1</sup> President of the Chamber of Crafts, Luxembourg

This new piece of legislation reconfirms the validity of the principle of cooperation between the schools and the competent professional chambers. Article 11 stipulates:

‘Vocational training is provided on the basis of cooperation between schools which shall provide theoretical training and the firms which shall provide practical training. To this end a coordination commission is herewith set up which shall be composed of the Government Commissioner for vocational training, one representative of the Ministry of Education, representatives of directors of technical secondary schools and representatives of the appropriate professional chambers. The commission may be expanded to include experts from the educational milieu and the professional milieu.

‘... The elaboration of curricula as regards theoretical vocational training and practical training as well as optional curricula shall be undertaken in cooperation with the professional chambers ...’

From this it is evident that the Chamber of Crafts enjoys a relatively strong power of intervention accorded it by successive pieces of legislation.

The question arises as to the nature of the situation in actual practice.

In general terms it may be asserted that the Chamber of Crafts offers and seeks a trusting and efficient cooperation with all the milieux interested and all the competent institutions, in particular with the Chamber of Labour which bears similar responsibility to that borne by the Chamber of Crafts and represents the interests of apprentices, the Ministry of Education, the Government Commission on Vocational Training, the Vocational Orientation Service, and, in a very direct manner, the vocational schools, their directors, and teaching personnel.

This system does not exclude direct relations between the school and the apprenticeship master if specific problems which concern one or more apprentices attending a school need to be solved. In general terms however, the role of principal interlocutor is assumed by the Chamber of Crafts. Furthermore it is the Chamber of Crafts which has power to authorize firms fulfilling a number of specific conditions to undertake the training of apprentices.

Vocational Training as it is conceptualized and implemented in Luxembourg comprises two aspects: theoretical

vocational instruction which is provided in schools and practical training provided in firms. Vocational training thus rests on two pillars which each provide a different proportion of the support depending on the characteristics and requirements of the various occupations.

Thus, if one is to arrive at a satisfactory result which pays due respect to the cultural, intellectual, and occupational aspirations of the individual and also takes into account the economic and technological developments taking place in firms, if one is to avoid a situation in which training becomes unilateral in favour of practical training and thus a hindrance to mobility, there is only one path to take, namely, that which advocates close cooperation and constant coordination between the main agents of vocational training.

One might ask what form such cooperation takes in practice. A number of situations may be taken to serve as examples to illustrate the answer.

Confronted with the multitude of problems which arise in the implementation of a worthwhile vocational training system, a number of persistent misunderstandings, and the inadequate exchange of relevant information between the vocational school and the professional milieu, the Chamber of Crafts undertook a few years ago to bring together at intervals the directors of vocational schools and other relevant bodies. These directors' conferences have had the effect of creating an atmosphere of objectivity and confidence which operates in favour of successfully finding solutions to problems and implementing realistic measures. They have further not only facilitated the solution of organizational problems and regulated day-to-day cooperation but have also contributed to a large extent to preparing and introducing — sometimes on an experimental basis — more extensive measures, e.g. the recent reform of vocational and technical education. Such endeavours to gain a better understanding of the problems confronting their respective partners have banished a number of prejudices and their unsalutary effects on the part of both teachers and the apprenticeship masters.

Cooperation also takes on a concrete form by the intervention of the services provided by the apprenticeship counsellor. The institution of apprenticeship counsellor was created a number of years ago, falls within the competence of the Chamber of Crafts and the Chamber of

Labour, and is financed from the public funds. The task of the apprenticeship counsellor is to seek to continually adapt vocational training to technological change by way of direct intervention within firms and schools and by means of contact with apprentices and their parents. The apprenticeship counsellor is also called upon to bring about an improved synchronization of the theoretical part and practical part of training programmes.

At present a project is being carried out by the Chamber of Crafts in cooperation with the teaching staff of vocational schools to elaborate new practical training programmes for some 40 craft occupations. A similar cooperation approach has been adopted with the professional milieu for a project to develop theoretical training programmes.

The introduction into the crafts sector some ten years ago of the apprenticeship record book necessitated cooperation from the vocational schools. Although the record book is an instrument of control over the practical training undergone in an enterprise and at the same time a didactic instrument with a view to the examination to be taken upon completion of apprenticeship, a certain information flow as regards the regular keeping of the record book and permanent supervision during the course of the apprenticeship are assured by the vocational schools. The Chamber of Crafts is informed of any incomplete record books.

The juries responsible for the selection of candidates for admission to the training of trainers courses also include representatives of the occupation in question.

For more than 25 years the Chamber of Crafts, by way of its Promotion of Crafts Department which was established on the basis of an agreement with the Luxembourg Government, has been organizing advanced training courses which represent a valuable instrument of vocational training for independent craftsmen, employees in firms in the crafts sector, and, more generally, for all craftsmen employed in the various other private economic sectors as well as in a number of public services. The implementation of these courses, which are attended by several thousand individuals each year, is entrusted where possible to the teaching personnel of vocational schools.

A similar situation prevails as regards the courses leading to the master craftsman

examination, especially as regards the management courses and occupational theory courses which are for the main part entrusted to the teaching personnel of vocational schools. Such an approach has the effect of providing the teaching staff with a permanent contact with the realities of the working world and represent a kind of automatic retraining. The approach has proved to bring advantages to both parties concerned.

In addition, by virtue of an agreement concluded in 1970 between the Luxembourg Government and the Chamber of Crafts, the latter is entitled to avail itself of the classrooms and workshops within outside vocational training establishments in order to hold its master craftsman courses and other advanced training courses.

An information and guidance campaign in favour of the craft occupations launched a few years ago by the Chamber of Crafts and repeated each year since then operates for the main part by way of the schools and in particular the teaching personnel having contact with pupils in the final years of compulsory schooling, i. e. those years immediately preceding the pupils' admission to vocational schools and apprenticeships.

These examples illustrate to some extent the type of cooperation existing between the schools and the professional milieu but are in no way exhaustive. They do however show that cooperation is indeed possible at a number of different levels,

and it is a fact that if vocational training at present functions without too many difficulties and in favour of the young people undergoing training, it does so to a large extent on the basis of the constructive cooperation which has developed among the various parties involved.

### Trainers

In-firm practical training in the craft sector is provided by master craftsmen who hold the master's certificate. The Chamber of Crafts is empowered to refuse or withdraw the authority to provide training for apprentices in the case of any enterprise which fails to fulfil specific conditions.

The training of master craftsmen takes place in courses comprising three training cycles. It consists of a training course in management of some 250 hours' duration, courses in applied occupational pedagogy, and courses of occupational theory. Candidates for the master craftsman examination should have gained five years' occupational experience since obtaining the vocational training certificate (CAP). The minimum conditions for effective training are fulfilled by senior master craftsmen/trainers.

However, as in other education systems, imperfections do exist. These must be detected and remedied. In recent years

the two professional chambers competent for this field namely, the Chamber of Labour and the Chamber of Crafts, have implemented a broad support and supervision service to cover apprenticeship.

### CONCLUSION

The upgrading of the occupational qualification of individuals engaged in the crafts sector, whether they be self-employed artisans working alone or in a family business, entrepreneurs operating a large or small firm, or journey-men required to fulfil a variety of functions within a firm, remains one of the principal preoccupations of the Chamber of Crafts, upon which the legislative bodies have conferred wide powers in the field of vocational training for craft occupations. This quest for upgrading is both real and permanent. Indeed, it could hardly be otherwise in the light of the fact that the existence, the future, and the development of craftsmanship are directly linked with the degree of qualification and skill of the individuals engaged in the craft sector and because the essential functions of craftsmanship are by definition based on a high level of qualification which is constantly being raised.

The objectives being pursued cannot be attained without a permanent commitment on the part of the agents supporting training and unreserved cooperation between schools and firms.

# Reflections of a holidaying trainer on the context of his work

by Jean-Marie Raimond<sup>1</sup>

## Foreword

*This article is not intended to be a fortiori a classically structured thesis but rather a list of points for reflection arising from practical life. Some aspects may well have already been dealt with elsewhere; others are nothing more than thoughts which have been chewed as one might chew a blade of grass on an afternoon walk. Furthermore, the context into which these thoughts fall comprises only the very restricted and very contestable context of personal experience. This personal account is moreover limited to the framework of only one EC Member State, namely, France.*

I entered adult education almost 25 years ago at a time when I had no great knowledge of the field. I persevered in my work and generally felt at ease and quite often considered myself to be serving a useful purpose. I am still working in the field but no longer experience these sentiments to the same extent despite the fact that since that time my convictions have deepened and perhaps my competence has improved. It is self-evident that this may be, *inter alia*, the consequence of insufficient adaptation to change; equally self-evident is the fact that it would be pretentious or naive to unreservedly subscribe to this hypothesis as the only explanation. In fact a number of things have changed which, despite the long time I have been engaged in this field, nevertheless represent a challenge to us. A few of the problems which cause me the greatest concern are discussed below.

## On the erosion of objectives

Since the end of World War II an awareness of the necessity and the value in both economic and social terms of adult education have rendered this field not

only an important social reality but also a social function. It gave rise to a boom in experimentation and a boom in hopes which have since that time found expression in a variety of forms and a variety of texts. This ample but heterogeneous explosion was the outward sign of a common intention among individuals to relocate themselves within a changed context; but it masked a number of grave terminological and, by extension, ideological ambiguities. These latter were to become the basis on which responses in the form of projects to overcome educational and cultural problems were to be – at first still haphazardly – conceptualized.

In effect, as we have had the occasion to show by analysis elsewhere<sup>2</sup>, it seems that the period from 1945 to 1975 was characterized by three periods, each of some ten years' duration.

The first period was that of economic reconstruction. The occupational potential of every individual had to be maximized in order to set the economic machine in motion again. In the context of France and adult education this corresponded with the establishment of the Association pour la formation professionnelle des adultes – AFPA (Adult Education Association). The objective of training was undoubtedly economic in nature.

The following decade was that of the race for economic growth and for quality. There was a general call to forge ahead along this path. This was the era when the USA, having taken over the baton, had so much credit available for scientific research that it brought about the brain drain. In France there emerged everywhere 'productivity centres' and 'expansion committees'. Not only was there everywhere a need for everything, but, in addition, now that a certain degree of comfort had returned, the

economic objective of training was supplemented by a social objective. A number of adult education institutions were created at this time and of this time. Like the institution in which I am engaged, they still retain, right down to their official name, evidence of their twofold calling.

The next ten-year period too had a twofold character: it was in fact an era of contradictions. A cleft developed between the training movement which seemed to be growing stronger as it proceeded and reality which was marking time and was soon thereafter to show opposite trends. In 1970 the employers and the employees' trade unions concluded agreements on training; in 1971 the public authorities afforded it legitimacy; innumerable training institutions of all kinds flourished. But, paradoxically, the rate levied did not increase as had been planned. Demand dwindled, and signs of consolidation became more frequent. Very soon the economic crisis had arrived. Despite having been guaranteed in legislation, the objectives of training began to be eroded away in face of day-to-day reality.

Almost overnight new openings were made available, favouring in particular population groups which were considered to be disadvantaged or marginal: skilled workers, inhabitants of priority urbanization zones, women, migrants, juveniles. But confusion grew. No one quite knew who wanted what. And since 1975 each year has only served to confirm the erosion of the funds available, while the consensus which seemed to have formed around the prospects of utility and generosity disintegrated.

## On the weight of economics and politics

In effect, sovereign over the objectives supported by the various training agents, one phenomenon predominated: economic growth.

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<sup>2</sup> Cf. 'Vers le temps de la deuxième génération' (Towards the era of the second generation), in *Formation Continue*, February 1978.

As long as economic growth was such as to confer upon adult education a claim to ensuring better adaptation to technico-occupational requirements or to satisfying social aspirations or to both simultaneously, there was no problem. Economic growth even played a regulating role within which everyone found his interests served and in so far satisfied the various forces involved. The economic crisis forced the trainers to retreat into a realistic dimension which had undoubtedly been grossly concealed by the projects they had initiated. Whatever their nature the latter had been founded on the concept of the pursuit of the developments which had justified them. But in this context the milieu responsible for training neglected to examine in greater depth some important facts, failing, *inter alia*, to analyse the relation between training and employment in either qualitative or quantitative terms.

But this economic situation, however disadvantageous and persistent it may have been, should not have been and should not now be allowed to deceive us: the structural elements linked with economic growth bring with them that which is required to exert an influence on training and its objectives. In fact, needs change beyond a given satisfaction threshold: from being quantitative in nature they become qualitative. From that point in time more attention should have been given to the fact that the initial education system, whatever weaknesses and failure rates may be attributed to it, was, on the strength of the demographic development, in fact in a position to meet the needs of the production sector; that France, like a number of other European countries, had too many students if one accepts that a proportion of 12 to 15 % of any given year group continuing their education beyond the *baccalauréat* — a norm which seems to have been accepted in both capitalist and socialist economic theory — is sufficient to replace their elders from both a technical and social point of view; and that technological development tends to reduce the role of middle management. In this context the simultaneous emergence some years ago of concepts such as classes for exceptionally gifted children and the upgrading of manual work is without doubt not entirely coincidental. In short, it was perhaps because its very occultation left room for fantasy or because the general well-being no longer necessitated its re-examination that the relation between economic growth and adult education was not sufficiently well apprehended and, in the adult education system which developed, not sufficiently

taken into account. Far-reaching changes must be made in this connection.

However, other factors too, currently obscured from view, must also be taken into consideration as much in order to explain the changes which have taken place as to endeavour to redefine the objectives of adult education. In fact, experience gained with adult education, the broadening effect brought about by the rapid advance of popular education movements, the attempted reforms of the initial education system, the widening of the scope of individual and collective aspirations, and the integration of working life into the cultural and collective dimensions of life contributed to bringing about a transformation of mentality and a maturation process which the public authorities, advocating a social philosophy of participation, encouraged. This caused training to be associated no longer only with the economy but also with culture and furthermore induced a new approach to the individual and knowledge. This gradual transformation culminated in the explosive unrest of 1968 by way of which the cleft between power and knowledge was wrest open. The challenge to the latter in fact placed it in the forefront of debate and located training in the same stroke within a power context.

Sociological reality had become political reality. Almost simultaneously the ambiguities in adult education were to be institutionalized in the form of legislation. The institutionalization of training afforded it a legal status and specified its normative aspects; it enabled training to be assessed and even quantified, but more important it transformed it henceforth into a political stake. Enlarged by their legitimacy, the ambiguities immediately re-emerged, yet the diversity of their origins was perhaps a greater blessing than had been assumed. It was easier to understand as is often the case, after the event — that the humanistic and technocratic objectives diminished *vis-à-vis* the economic growth phenomenon when the economic crisis revealed the pre-eminence of the latter and when its partisans (who sometimes counted on each other for mutual advancement) found that they had lost their position of strength. The transfer of sociological currents to the political field which occurred at approximately the same time only served to add to the contradictions within this situation. Henceforth, the interplay between these two — now combined — aspects was to weigh heavily on the future of adult education.

It is evident that the initial education system, having found difficulty in coping with demographic variations and having been unsettled by various reform efforts based on sometimes very divergent concepts and bringing results which have often been challenged and criticized, cannot be taken to serve as a point of reference or anchorage. Indeed, it was on the basis of adult education that initial education was to be reconceptualized to conform with the principle of continuing education. But how can one hope to make a connection between two systems when each is based on a different set of logical principles, if indeed the latter do exist.

In fact, even if some vigilant individuals still succeed in upholding a number of key guidelines, it seems as if the objectives of adult education are now determined on an immediate-term basis, having in common only their respective topicality, and are decided in the light of targets which are indeed political but are short-term and no longer on the basis of a policy, a major plan defining in the long term the relations between the individual and society and those between training and economic, social, and cultural life.

## On the importance of institutional criteria

This development in its entirety from which training emerges as nothing more than a stake has not failed to accentuate the classic French cleft between the public training system and the private training system. Every election campaign witnesses a revival of the debate on this subject and that which is true of the initial education system is of course also valid for the adult education system in which the term 'private' is almost always understood to mean 'in-firm'. Yet there are a number of institutions — indeed of no small significance<sup>1</sup> — which are firstly non-profit institutions and secondly characterized neither by some entre-

<sup>1</sup> For example, Association du centre universitaire de coopération économique et sociale — ACUCES (Economic and Social Cooperation Centre), Centre d'études supérieures industrielles-CESI (Advanced Training Centre for Industrial Studies), Centre d'études et de formation industrielles — CEFI (Industrial Education and Training Centre), the various centres of the Association nationale pour la formation et le perfectionnement du personnel d'entreprises — ANFOPPE (National Association for the Training and Advanced Training of Personnel in Enterprises), and those of the Union nationale des organismes privés de formation continue — UNORF (National Union of Private Continuing Education Bodies).

preneurial taint nor by an odour of sulphur: they are simply administered on a parity basis (or more precisely on a tripartite basis: the public authorities, the employees trade unions, and the employers organizations). It is of course these that are of greatest interest in this connection.

It is expedient to retain for the use of adults places where training, controlled and stimulated on a parity basis, can be allowed to continue experimentation and represent a source of aspiration and opportunities for individual and collective advancement. However, examination of the funds allocated to training would seem to indicate that these are increasingly being channelled to public establishments and training centres run by firms. However, the direct contact and detachment which characterize our centres have been and remain the principal factors of innovation. Over a long period adult education developed outside the framework of the traditional education system; for a long time the trainers in adult education were recruited from sources outside the traditional teaching profession – even if the universities are now training trainers and the trade unions, who were opposed to this activity becoming an occupation and favoured seconding individuals ‘from the field’, are now beginning to recognize, professionalize, and organize them.

One is obliged to admit that it is the institutions of this kind which have in large measure contributed to promoting both the concept and the practice of adult education. Whether one considers the training of engineers from the working world, collective training projects, the preparation for the vocational training certificate (CAP) by means of accumulable modular units, functional training projects, or the various aspects of social advancement which are now being reconceptualized on the basis of our long-established practices, only little is found to have emerged from the schools and the universities, no more than from the trade unions or political organizations. This is undoubtedly no coincidence. Admittedly, all parties have had the opportunity of being commissioned by the public authorities and of enjoying public confidence in implementation of such commissions. But our organizations had neither unwieldy traditions nor great preachers declaring what is good and proper, neither have they made sacrifices to cost-efficiency and the short-term interest. It is this which has permitted them to promote both innovation and quality

– aspects which are conspicuous by their absence in public debates and legislation.

However, there are undoubtedly other more profound reasons for this. The quality of the solution approaches initiated is probably measurable in terms of the degree to which they are tailored to meet the needs of reality and their pertinence in relation to the needs experienced both by the adult at the workplace and in the operation of the enterprise or organization. Whether the problem is on a social, interpersonal, occupational, or technical level, the approach adopted is one involving making contact with and sensitizing those who are the actors on the stage yet at the same time the products of a not always convincing educational system and conceptualizing with them innovative solution approaches. Strangely, it is the process of placing a problem in its proper perspective which constitutes a valuable contribution to the development of an educational system, especially when the orientation sought is that of continuing education. Our institutions are by their very nature places of interpersonal contact and it is their detachment which facilitates the identification and solution of problems and greater efficiency in fulfilling a regulatory and innovatory role. The value of the solution approaches which adult education offers as a potential approach to improving the initial education system is connected to a large extent with its twofold characteristic: detachment from the occupational and educational milieu and permanent contact with those directly involved. What a valuable complementarity *vis-à-vis* the other types of institutions – and what a saving and social benefit if this were only acknowledged!

### On a number of prospects

Nostalgic or even pessimistic reflections? Certainly not! At most a side-step in order to be able to identify a few characteristics which could be developed into a concept which is valid for the present and the future. It is indeed high time for such an undertaking. That which the institutions of continuing education, whatever their status (at least in France), are now experiencing is illustrative of the crisis situation now prevailing at the economic and cultural level and is furthermore disquieting from the qualitative viewpoint. We must advance further.

Advancing further, in the contemporary context, implies on the one hand meeting the imperative need of restoring the true purpose and true role of adult education in economic and social development and on the other hand identifying those changes which are necessary and those population groups which are to be affected and undertaking immediate action.

Restoring the purpose and role of adult education: we emphasize that the long term should be given as much consideration as the short term in decisions regarding objectives, techniques, and finance: we maintain that it would be inexpedient to subdivide adult education into general education, socio-cultural education, and vocational training if only the latter were to benefit; and we consider that justice can be done to the economic importance of the concept of training provision being in line with manpower requirements, primarily as regards the young but also as regards their seniors, only by recourse to sound enterprises in which continuing education retains its full investment value. Being neither a luxury item nor an inheritance from the euphoric years of economic growth, training remains one of the foundations of economic development and one of the causative agents of a human added value.

Identifying the changes required: the present, despite its opaqueness, is already revealing that which will in the future – even in a context of greater calm – represent a problem and a real social need. In addition to their problem of occupational integration, young people are manifesting a new form of poverty which necessitates real social reflection, as does the case of a number of other population groups in danger of marginalization. The reduction of unemployment, the advancement of so-called ‘poorly qualified’ workers, the solution of the problems of migrant workers, the transformation of relations at the workplace, the development of technologies and industrial structures, the improvement of working conditions, the awakening of a community consciousness as regards health – all these are tasks which are becoming increasingly urgent. The various social groups – urban, rural, and regional – also need to regain access by way of opportunities of collective training to a more effective mastery of the transformations taking place in our civilization. Finally, the needs of the developing countries together with those of our external trade represent an increasingly

audible call for a training methodology which interested countries could themselves adopt.

A new approach which realistically combines respect for the constraints of today and the aspirations for tomorrow is daily becoming increasingly urgent.

Even if such an approach is not easy to conceptualize, it would be feasible within the framework of a comprehensive project, indeed why not with reference to a harmonized European approach? The expectation exists, as does a 'capital stock' to enable training to become a matter concerning all the partners, be-

ginning with the trainees themselves. But all this requires a certain amount of overstepping limits, of pluralism, a courageous and receptive society, active partners, and alternatives. This is the price for which continuing education will again become the place of gestation prior to metamorphosis.



## INFORMATION

### France

## Training of trainers

The importance of training for trainers measures has increased considerably over the last few decades in accordance with the growing demand for vocational training on the part of the exceptionally high number of young people born between 1947 and 1970 on the one hand and adults in general on the other.

The quality of the training of trainers has also improved and now incorporates the field of pedagogy, an aspect which had until recently been neglected in favour of the trainer's occupational and technical competence. It remains, however, very varied as regards duration and quality, these depending in particular on:

- the target group addressed by the trainers: young people undergoing initial training or adults in continuing education;
- the institution in which they are engaged: vocational school, private establishment, public establishment, training centre for apprentices, adult education establishment, firm;
- the level of training provided.

### 1. TRAINERS PROVIDING INITIAL VOCATIONAL TRAINING

These trainers provide instruction for young people who, having completed compulsory schooling (normally at 16 years), choose to continue their studies in the form of vocational training.

Engaged within an education system which is administered at national level by the Ministry of Education and the Ministry for Universities, trainers providing initial vocational training are recruited according to strictly defined criteria specifying requirements regarding their secondary education qualifications, and university qualification and, in some cases, occupational experience. Those engaged in public educational establish-

ments are recruited on a competition basis and undergo several years of training in pedagogy and technology. Trainers engaged in the private sector are recruited at the discretion of the respective establishments and firms.

#### 1.1. Trainers engaged on a full-time basis in the vocational streams of public educational institutions.

These trainers are trained under the auspices of the Ministry of Education, the Ministry by which they are employed with the status of public officer. Their selection and training are based on four principles:

- recruitment by competition among the holders of secondary education and university qualifications;
- long training in specialized training centres established by the Ministry of Education. The training the trainers receive comprises both the pedagogy and technologies relevant to the subject they intend to teach. The trainers providing instruction in these specialized centres are selected by competition and by virtue of their extensive experience and skills in pedagogy;
- a large measure of time allocated to practical training, this taking the form of periods of practical application of pedagogic skills in educational institutions. And periods of in-firm training serving to initiate the trainer into working life and deepen his technical competence;
- opportunities made available by the Ministry of Education for the trainer to undergo continuing education after he has begun his career. These take the form of seminars and in-firm training courses.

The application of these principles varies according to the level of the instruction which the trainer provides:

- *Teachers engaged at a lycée d'enseignement professionnel*-LEP (technical secondary school) and preparing young people for qualification as skilled worker (i.e. for the vocational training certificate and vocational training diploma) undergo a two-year training course at an Ecole normale nationale d'apprentissage-ENNA (technical teacher training college), of which there are now six in France, all estab-

lished since 1946. Teachers of general disciplines are required to hold a university degree; teachers of occupational disciplines are required to hold the senior technician's diploma and have in-firm experience.

- *Teachers in the vocational stream of academic secondary schools* preparing young people for the various qualifications with a technical bias (*baccalauréat* in technical subjects, technician's certificate and senior technician's certificate) undergo a four-year course of training at the Ecole normale de l'enseignement technique-ENSET (teacher training college for technical education). They are recruited during the second year of higher education by means of a very stringent competition for which instruction is provided in special classes in a number of major academic secondary schools. They are trained in their specialism for the various university qualifications entitling them to teach (bachelor's degree, master's degree, teacher's certificate qualifying for secondary technical education, and the advanced competitive examination for teachers).

#### 1.2. Teachers engaged at agricultural schools are trained under the supervision of the Ministry of Agriculture in special schools, each providing training at a different level:

the Ecole nationale supérieure des sciences agronomiques et appliquées (national college of agronomic and applied sciences), the agricultural engineering faculties of the various engineering schools, the Institut national de formation des professeurs certifiés de l'enseignement agricole (national training institute for certified teachers of agricultural sciences), the Institut de formation des professeurs de collèges agricoles (training institute for teachers in agricultural colleges), and the Institut national de promotion supérieure agricole (higher national institute for the promotion of agriculture). These establishments receive pedagogic support from the Institut de recherches et d'applications pédagogiques (institute for pure and applied pedagogy).

#### 1.3. The recruitment of trainers for vocational schools in the private sector is

governed by a number of criteria as regards competence which is to be attested by a certificate and/or, where appropriate, by relevant in-firm experience. These criteria are stipulated by the French Government in order to guarantee a high qualitative standard of instruction. However, these trainers are not obliged to undergo a long-term training in pedagogy comparable with that provided at ENNA and ENSET for trainers for the public sector.

1.4. *Trainers engaged in training apprentices* either in a Centre de formation d'apprentis-CFA (training centre for apprentices) or within a firm are usually acknowledged professionals in their specialism with a training in pedagogy restricted to the modalities particular to the system of parallel training. Unlike their public officer counterparts these trainers have the status of employee and are recruited on a contractual basis by institutions associated for the main part with the professions (the chambers of commerce and industry, chambers of crafts, professional associations, and the firms). It is difficult to accurately pinpoint to what extent their level and mode of training exceed the minimum levels and standards stipulated in legislation. The results of a number of surveys conducted recently in one region and in one occupational branch might, however, serve to indicate a number of trends:

During their two-year apprenticeship trainees spend the major part of their time in a firm under the supervision of an apprenticeship trainer. The function of the apprenticeship trainer is stipulated in legislation and is juridically guaranteed by the employer who is obliged to obtain the approval of the Comité départemental de la main-d'oeuvre (district manpower committee) before he is allowed to recruit apprentices. Approval is dependent on the provision of sufficient evidence of a high standard of morality and professional competence, in particular on the part of those who are to be responsible for the apprentices. Professional competence may be attested by a formal qualification or at least five years' professional experience with the status of skilled worker.

Except in the case of very small craft firms, responsibility for the training of apprentices is normally entrusted to a competent skilled worker, foreman, or technician who is then referred to as the apprenticeship trainer.

Pedagogic supervision over the training provided for the apprentices is entrusted

to an apprenticeship inspector. The relatively small number of such inspectors implies that the control they exercise can be only partial, while the workload incumbent on each apprenticeship inspector does not leave room for him to render apprenticeship trainers the assigned volume of pedagogic assistance.

During the some 400 hours per year which the apprentice spends in a CFA he receives a pedagogically structured training which includes general training, technical training, and practical training.

Training is provided by trainers who are members of the permanent teaching staff of the respective CFA and are recruited at the discretion of the director from among applicants having a specific level of qualification which is determined by the public authorities and may differ according to the discipline being taught:

- General instruction: *baccalauréat*, *baccalauréat* in technical subjects or any other qualification entitling the holder to teach in a technical academic secondary school;
- Theoretical technical instruction: vocational training certificate, master's certificate, or any other qualification entitling the holder to teach technical subjects in a technical academic secondary school;
- Practical technical instruction (supervision of practical studies): successful completion of the relevant training provided by the Association nationale pour la formation d'adultes-AFPA (national association for adult vocational training) or appropriate professional experience in a technical specialism.

A survey conducted in 1977 in the Aix-en-Provence/Marseilles region of trainers engaged in training centres for apprentices highlighted a number of differences among the various centres:

- The training centres for apprentices which are run by the public authorities employ staff on a part-time basis from the Ministry of Education who have undergone training at an ENNA as described above;
- The training centres run by the chambers of crafts or coordination committees affiliated to a specific occupational branch (e.g. for the building sector or the metallurgy branch) employ full-time trainers who have undergone training courses in pedagogy. The survey also showed that a satisfactory relationship exists only in rare cases between the teaching staff of the CFA and the apprenticeship trainers.

## 2. TRAINERS WITHIN THE CONTINUING VOCATIONAL TRAINING SYSTEM

Trainers providing continuing vocational training operate within a system which was designed to be more flexible than the initial vocational training system and to embrace all the agents in socio-economic life: firms, public authorities, trade unions, associations, etc.

The legislation regulating continuing vocational training does not afford any one institution a monopoly over adult education and entitles any employee or self-employed worker or more generally any individual the right to provide training. In order to promote the exercise of this right among employees, the legislation further provides for special leave to this effect by affirming a general right to absent oneself from work in order to provide instruction in a public or private educational establishment on a training course which is approved by the state.

With a view to providing training for some 2 800 000 adults per year, the VII French Economic and Social Development Plan (1976 to 1980) provided for the recruitment into the adult education services of some 20 000 trainers on a permanent basis and some 150 000 part-time trainers on an occasional basis. Although such trainers are required by statute to have undergone pedagogic training, the fact that neither the duration nor the content of such pedagogic training is specified in detail has led to a great diversity in standards.

### 2.1. *Trainers in adult education – permanent staff*

Permanent-staff trainers usually hold a position in training management within a firm (staff member responsible for training) or a training establishment. Permanent-staff trainers are less numerous than occasional-staff trainers and are employed only in large firms and public and private training institutions.

Some training establishments, both public and private, specialize in providing long-term training courses for permanent-staff trainers engaged in adult education. They offer courses of several months' duration specially adapted to the pedagogy involved in the system of parallelism, i.e. alternating periods of practical training and theoretical training. The courses seek to enable trainers to properly fulfil their various functions, that is to say, to analyse training re-

quirements, define training policy, organize training courses, and counsel groups of trainees.

AFPA has gained particularly wide experience in the training of trainers by virtue of the training it has provided its own monitors and instructors prior to their secondment to other organizations and firms.

In addition to such long-term courses there exist a number of short-term courses. These are designed for both permanent-staff trainers and occasional-

staff trainers. The training provided is described below under the section dealing with trainers employed on an occasional basis.

Continuing training counsellors who are responsible for the organization and animation of the adult training measures organized in the public educational establishments undergo a one-year training course in a Centre académique en formation continue-CAFOC (Academic vocational training centre) under the supervision of the Ministry of Education.

2.2. Trainers employed on an occasional basis

Trainers employed on an occasional basis exercise a counselling function. They work on a part-time basis and their training activities constitute only a secondary occupation. They are recruited on the basis of their skill or competence in a specific technique or discipline and usually undergo a special short training course in pedagogy.

Some 30 000 teachers from the initial education system are engaged in part-

TRAINING OF TRAINERS:

Recruitment conditions and training modalities applicable for the principal occupations in vocational training

A — Training of young people

Function	Recruitment conditions	Training
Teacher in a technical secondary school (LEP) preparing pupils for qualification as skilled workers	Competitive examination for holders of a higher education qualification and in-firm experience	Training in pedagogy and technical training in a specialism in the schools run by the Ministry of Education together with short continuing training courses
Teacher in an academic secondary school preparing pupils for the technician's certificate and senior technician's certificate	Competitive examination during the second year of higher education	As above
Teacher in a private vocational school preparing pupils for qualifications ranging from skilled worker to white-collar worker and engineer	Formal qualifications as stipulated in legislation	Varies from institution to institution—usually in the form of short courses in pedagogy
Apprenticeship trainer responsible for the training of apprentices within an enterprise	Formal qualifications or practical experience as stipulated in legislation	
Trainer in a training centre for apprentices preparing trainees for qualification as skilled workers	Formal qualifications or practical experience as stipulated in legislation	

B — Training of adults

Function	Recruitment conditions	Training
Trainer engaged in training measures organized by schools and universities	Normally, qualification as teacher in the initial education system	Course organized by an academic vocational training centre (CAFOC)
Trainers employed by AFPA	Formal qualification and occupational experience	Four-month course in pedagogy together with short continuing education courses
Training officer or permanent-staff trainer in an enterprise or a training institution	Vary greatly	Long or short course in pedagogy; training in co-animation
Occasional-staff trainer	Vary greatly, preference given to professional competence in the specialism	Short course in pedagogy; training in co-animation

Source: Centre INFFO, Paris.

time work in training activities organized in establishments run by the Ministry of Education. In preparation for their work in the training of adults some 50 % of these trainers undergo short-term training courses in a CAFOC.

In addition a large number of skilled workers, employees, technicians, white-collar workers, and engineers provide training in their own firm or in a public or private training establishment. In preparation for their work they undergo some kind of training in pedagogy. Since the nature of the training is ill-defined in the relevant legislation, it at best takes the form of one or several short courses on pedagogic methodologies and instrumentalities. Various training establishments offer this type of course for trainee trainers from one or a number of institutions.

The training of trainers employed on an occasional basis may also assume a twofold form incorporating collective preparation together with coordination sessions and sessions devoted to the assembly of a pedagogic instrumentality.

## *Federal Republic of Germany*

### **Pilot projects concerning initial and continuing training of in-firm trainers<sup>1</sup>**

In vocational training, which in the Federal Republic of Germany is provided in the part-time vocational school and the firm (dual system), in-firm trainers constitute that group of persons who, together with vocational school teachers, carry responsibility for the adaption of vocational training to social, technological, and economic development. In order to discharge their share of this task properly in-firm trainers must possess not only professional qualifications but also pedagogic qualifications which enable them to optimally transmit knowledge and skills to their trainees. Pilot projects geared to the training of in-firm trainers

and vocational school teachers, which are being fostered by the German Federal Government, serve to provide these pedagogic qualifications. The purpose of these pilot projects is to develop and test verifiable procedures and materials which are applicable and transferable in the field of vocational training policy, research, and practice.

An overview of pilot projects serving the (1) pedagogic training of in-firm trainers, (2) continuing training of in-firm trainers, (3) continuing training of training counsellors, and (4) continuing education of vocational teachers engaged in the vocational training of adults follows. It does not relate, however, to all the pilot projects dealt with in this article.

The Bundesinstitut für Berufsbildung – BIBB (Federal Institute for Vocational Training) is participating in many of the pilot projects described below. Publications which are available are indicated in this text by an asterisk\*.

Unpublished documents are available on all pilot measures. The Federal Institute for Vocational Training would be glad to provide further information.

#### **1. Pedagogic training of in-firm trainers**

The Berufsbildungsgesetz (Vocational Training Act) lays down that in addition to professional qualification in-firm trainers should have acquired pedagogic qualification. In the Ausbilder-Eignungsverordnungen – AEVO (Trainer Aptitude Regulations) of 1972 (in the meantime supplementary regulations for most of the training sectors have been issued) the knowledge required is classified in four groups, namely basic aspects of vocational training, planning and implementation of vocational training, the young person undergoing vocational training, and legal provisions. In addition a skeleton curriculum plan exists which contains recommendations as to concretization of subject content, duration of pedagogic training, and weighting of subject fields. However, a number of organizational, personnel-specific, and content-specific skeleton conditions which are determinants for the design of pedagogic training measures are not specified. It is in this connection that the four of the following pilot projects are of interest.

A pilot project which the Bund Deutscher Baumeister, Architekten und

Ingenieure e. V. (Association of German Builders, Architects, and Engineers) has launched has a different educational policy basis in that the freelance professions involved are not bound by any trainer aptitude regulations. The need to provide pedagogic training for trainees in these professions has nevertheless been recognized and voluntarily taken in hand.

#### *Pilot pedagogic training courses for in-firm trainers in the industrial sector\**

During 1972–73 three pilot courses of this type were organized, financed, and run by the Industriegewerkschaft Metall Berlin (Metalworkers Trade Union Berlin), the Berlin Chamber of Industry and Commerce, and the Christliches Jugenddorfwerk Deutschland e. V. (German Christian Association for the Establishment of Youth Villages), Salmünster-Hausen near Frankfurt-Main.

These first pilot courses in the field of pedagogic training for in-firm trainers had two main objectives, namely, to develop curricula for pedagogic training measures and to provide training measure organizers and lecturers with planning and procedural guidelines.

For the purpose of designing curricula, learning goals and training subject matter were identified against the background of the trainer aptitude regulations (AEVO), taking into account thereby the organizational and duration-specific aspects and possibilities. The curricula were then tested in several pilot courses set up on a full-time basis, each offering 160 class contact hours. In addition, instruction materials were developed and made available also to other organizers undertaking to set up pedagogic training measures.

With regard to planning procedure it was proposed that the planning and preparation of courses of pedagogic training proceed in two phases. In the first phase the course lecturers should decide on the subject fields and design the instruction schedule (rough planning). In the second phase the lecturers should each prepare the necessary subject material for their assigned class contact hours (detailed planning).

Studies on the optimal grouping of participants revealed that in courses of this type it was very much in the interest of successful learning at practice-relevant level to separate in-firm trainers in the industrial sector from those in the commercial sector.

<sup>1</sup> See H. Tilch, page 9 of this Bulletin: In-firm trainers in the Federal Republic of Germany — tasks, training, continuing training.

*Pilot pedagogic training seminars for in-firm trainers in the industrial sector\**

(1972–80; organized, financed, and run by the Bavarian Ministry for Labour and Social Affairs, Munich)

In these seminars, various subject field constellations were set up and tested. Special areas of emphasis have up to now been career self-profile, practice instruction, and relevant legal provisions.

By means of confrontation with their career self-profile the in-firm trainers are sensitized *vis-à-vis* determinants of their training tasks such as working environment, working conditions, etc. Emphasis on practice instruction has enabled the in-firm trainers to make practical use of what they have learned (planning transfer).

*Pilot pedagogic training course for trainers in the field of freelance professions\**

(1975–77; organized, financed, and run by the Bund Deutscher Baumeister, Architekten und Ingenieure e. V. (Association of German Builders, Architects, and Engineers), Bonn.)

In line with the trainer aptitude regulations (AEVO) a pedagogic training course specifically tailored to this target group was developed. Prior to designing the course a training demand analysis was undertaken in order to identify and list the typical pedagogic functions of these trainers.

Several trial runs confirmed that the pilot course was properly geared to the qualification needs of the trainers. A special concept relating to instruction methods which effectively activate participant participation was designed for the course lecturers.

## 2. Continuing training of in-firm trainers

The main purpose of continuing training measures for in-firm trainers is to broaden and further specify the minimum qualification requirements laid down in the trainer aptitude regulations (AEVO) and to equip the trainers with qualifications enabling them to plan and discharge their training tasks independently. In this connection they must take fully into account the following points:

- In the official training regulations the structure and subject content of vocational training are regulated. The task of the trainer is to develop on this basis in-firm training plans and work tasks (AEVO, planning and implementation of vocational training).
- Learning aptitude and learning behaviour of the trainees are factors which greatly influence learning progress (AEVO, the young person undergoing vocational training). Psychological-pedagogic qualification must be intensified in the case of trainers working with special target groups such as mentally or physically handicapped juveniles. In this connection the special didactic preparation of the subject content is highly important.

In the following pilot course emphasis is therefore placed on aspects of in-firm training planning and the training of special target groups.

The Modellehrgänge Ausbilderförderungszentrum AFZ (trainer promotion centre pilot courses) were designed for a larger target group. These qualification courses are open not only to in-firm trainers but also to lecturers, moderators, and multipliers (trainers of the trainers). The question as to whether and if so to what degree the need for a centre of this type exists was also studied.

*Pilot pedagogic training courses on the planning and implementation of in-firm vocational training open to in-firm trainers in the industrial sector\**

(1976–77; organized, financed, and run by Siemens Company.)

The purpose of these pilot courses was to develop new forms and methods of transmitting knowledge and skills (AEVO, planning and implementation of vocational training). In one pilot course the in-firm trainers were given didactic instruction which qualified them to independently plan periods of in-firm training and select or produce suitable instruction material. For this purpose a course type was developed in which didactic knowledge and skills closely geared to technical, pedagogic, and psychological subject content were transmitted. Training in the development of instruction materials and practice in the art of instruction as well as practice in teaching theoretical subject matter were included.

Drawing on the results obtained in the pilot course a course plan for the con-

tinuing training of in-firm trainee trainers in the industrial sector was designed which contains detailed information on subject content, organization, instruction methods, and media usage. Guidelines for the preparation of course instructors were also elaborated.

*Pilot courses on the methodical qualification of trainers*

(1978–81; organized, financed, and run by the Stiftung Rehabilitation Heidelberg (Heidelberg Rehabilitation Centre).

The pilot courses aim at helping trainers providing in-firm training in metalworking and commercial occupations to develop learning goal-oriented training curricula. On the basis of examples taken from actual in-firm training practice and taking into consideration the divergent learning aptitudes of various groups of trainees procedures are to be identified which enable the trainers to develop on their own responsibility in-firm training plans and training tasks in accordance with the qualification requirements stipulated in the official vocational training regulations. These procedures are to be taught in courses established specifically for this purpose.

*Continuing training of in-firm trainers in the commercial sector\**

(1979–81; organized, financed, and run by the Deutsche Angestellten Akademie – DAA (German Salaried Employees Academy), Hamburg.)

Involved is the first pedagogic continuing training measure for trainers in the commercial sector. Since no experience has been gained to date with regard to the promotion of this target group, this pilot project takes on innovative importance. The objective is to design a qualification concept which is oriented specifically towards the typical workplace training situation in the commercial sector. The basis for the development of a training plan is an analysis of the training situation in training firms which also takes the situation of the training personnel and the trainees into account.

*Psychological-pedagogical training of trainers of physically handicapped juveniles*

(1977–80; organized, financed, and run by the Heidelberg Rehabilitation Centre.)

The purpose of this pilot project was to develop a psychological-pedagogical

qualification concept and then test it in pilot seminars. The seminar training content is geared to the didactic specificities of training situations such as the teaching of a certain skill or counselling and advice at the workplace, for example.

To support this pilot project data was collected on relevant experiences of training personnel in vocational training institutions, and interview statements made by handicapped juveniles undergoing or intending to undergo vocational training were evaluated. The results of this work are also to be made available to trainers who are not primarily engaged in training handicapped juveniles.

*Special pedagogic qualification of trainers of slow-learning juveniles*

(1979–83; organized, financed and run by the German Christian Association for the Establishment of Youth Villages, Salmünster-Hausen near Frankfurt-Main.)

The purpose of this pilot project is to provide training at didactic and methodological level via practical job-specific examples for trainers training young people for woodworking and metalworking occupations. Aspects of trainee differentiation and individualization are given main emphasis. The basis for the development, of training course curricula and instruction material are results derived from studies on typical difficulties which trainers face in dealing with young people who have difficulty in learning. Trainers in a number of vocational training centres/institutions and in industrial firms will be involved in testing the training course curricula.

*Modellehrgänge, Ausbildungsförderungszentrum AFZ (trainer promotion centre pilot courses)\**

(1976–79; organized, financed, and run by the Berufsförderungszentrum Essen e.V. BFZ (Careers Promotion Centre).

The purpose of the pilot courses is to develop a concept for the design, differentiated as to subject content and organization, of courses for the pedagogic and skills-didactic training of training personnel (for example trainee trainers and training managers). A total of about 80 short-term training courses, each lasting from two to five days, were conducted, in the course of which new types of in-firm and suprafirm exchange of experience among senior personnel in

the field of vocational training were designed and tested. By means of special seminars and the establishment of an information service efforts were made to achieve a multiplier effect.

An advisory committee composed of personalities qualified in vocational training matters representing entrepreneur, employer, and employee organizations assisted the Careers Promotion Centre in this project.

With the founding of a trainer promotion centre association at the end of 1979 the ground will have been laid for the establishment of a centre providing services to trainers and to lecturers, directors, and organizations involved in trainer training measures. The association is being supported by entrepreneur, employer, and employee organizations which carry a share of responsibility in the field of vocational training and by the German Federal Government.

### 3. Continuing training of training counsellors

Training counsellors constitute a special group within the dual system of vocational training. They are charged by chambers of industry and commerce respectively chambers of crafts or other competent bodies with the task of supervising in-firm training and counselling training firms, trainers, and trainees.

Many training counsellors do this work on a voluntary basis or in addition to their regular job. Approximately 500 training counsellors in the industrial, commercial and craft sector are employed full-time as counsellors. Most of the training counsellors are fully qualified trainers with considerable experience as training counsellors. Special training counsellor qualification is not legally required.

The purpose of the following pilot projects is to increase the volume of training counsellor activities and to broaden the skills of training counsellors in the various counselling tasks.

*Cooperative system of training counselling*

(1973–83; organized, financed, and run by the School, Youth, and Vocational Training Affairs Authority of Hamburg in cooperation with the Hamburg

Chamber of Crafts and the Agriculture and Landscape Architecture Committee).

Cooperation of the above institutions, each of which has specific competences in the education and/or employment system, has two main objectives:

- The Chamber of Crafts and the Agriculture and Landscape Architecture Committee, assisted by four training counsellors, will advise the training firms on whether and if so how additional training places can be provided. Special attention will be given to the identification of marginal trainee groups;
- By drawing career guidance and career information services into the effort and utilizing their facilities, a feedback to young people looking for a training place is to be ensured.

The cooperative system will be managed by a contact office which is to carry responsibility for the exchange of experience and information and organize a total of 60 continuing training seminar days.

*Development and implementation of pedagogic continuing training seminars for training counsellors and apprentice supervisors and production of relevant media material and working documents serving to facilitate the creation of additional training places*

(1979–83; organized, financed, and implemented by the Zentralverband des Deutschen Handwerks – ZDH (Central Association of German Crafts), Bonn.)

Within the framework of this pilot project a continuing training course is to be developed which will serve to familiarize training counsellors more thoroughly with their various counselling tasks and above all to prepare them to take over key functions at the interface of the education system and the employment system. Taking into account regional and sectoral specificities and special training place problems, the training counsellors are then to advise handicraft firms on the best ways and means of expanding their training capacity.

### 4. Continuing education of vocational teachers engaged in the vocational training of adults

The tasks of teachers engaged in the vocational training of adults are in many

cases very similar to those of in-firm trainers, and a number of in-firm trainers also work in this field. Tasks and qualification requirements vary considerably. Very little information is available on the number and qualification level of the teachers. It can be assumed that most of the teachers have practically no pedagogic qualification. Some firms and educational institutions provide pedagogic training themselves. There are no binding guidelines for the pedagogic training of this target group.

The following two pilot projects involve concepts, instruction material, and proposals for improving the pedagogic qualification of these teachers.

*Promotion of continuing education teachers under the Vocational Training Act – trial run of a training course for lecturers (Ausbildung der Dozenten)\**

(1977–1978; organized, financed, and implemented by the Berufsbildungswerk des Deutschen Gewerkschaftsbundes GmbH, Düsseldorf (continuing vocational training centre of the German Federation of Trade Unions).)

Pilot courses providing pedagogic training for full-time and part-time teachers of adult vocational training were developed. In addition an existing training plan for the training of teaching staff was evaluated from the standpoint of possible use in a course concept involving three courses, each consisting of nine weekend seminars. Guidelines for the course directors and pre-course and post-course instruction material were produced.

*Development and testing of qualification seminars for part-time continuing education teachers*

(1976–1980; organized, financed, and implemented by the Arbeitskreis Universitäre Erwachsenenbildung e.V. (Working Party for University Adult Education), Hamburg-Oldenburg)

The purpose of the pilot project is to elaborate a standardized concept of basic pedagogic training in seminar form for part-time adult education teachers in various institutions active in the field of occupational, general, and political continuing education. The seminar material is so designed that it can easily be adapted to various types of learning procedure and is suitable for use in teaching participants who have no university degree.

## United Kingdom

### Training of teachers in further education

Institutions providing courses for intending teachers in further education have been established for mature students in London, Bolton, Huddersfield and Wolverhampton. Their main purpose is to serve the staffs of colleges of further education and technical colleges by providing a variety of courses suitable for specialist teachers of engineering, business studies, mathematics, science, general studies, agriculture, building, printing, textiles, tailoring, painting and decorating, nautical studies, and nursing.

The four colleges of education (technical) are constituent members of their nearest university institute or school of education and provide two courses which lead to the award of a university certificate in education (or graduate certificate in education for graduate students).

There is a pre-service course for students who wish to be trained as teachers before seeking technical college appointments. It lasts for one academic year and includes a study of educational principles and their application to the teaching of students' special subjects to technical college students. All students spend eleven weeks teaching their subjects in technical colleges. Applicants for this course must have a qualification in the subject they intend to teach, for example, university degree or diploma; higher national certificate or diploma; membership of a professional institution; full technological certificate (or, where this is not awarded, a final certificate) of the City and Guilds of London Institute, advanced RSA<sup>1</sup> certificates in shorthand or typewriting. They should also have relevant industrial or business experience. Non-graduate applicants should normally be over 24 years of age. Maintenance grants are available which take into account students family responsibilities.

The second is a similar course for serving members of technical college staffs who have not been trained as teachers. It lasts for four terms. The first and final terms are spent in a college of education (technical) and the second and third terms are spent teaching in the students' own technical college.

The content of the course is adapted to take student's teaching experience into account; students who satisfy the entrance qualifications, which are similar to those for the pre-service course, are seconded on full pay and are awarded a university certificate in education when they complete the course successfully.

In addition the four institutions provide day-release courses, conducted at extramural centres, for serving teachers in colleges of further education and technical colleges. The courses last for two years and lead to the certificate in education.

The four institutions also provide a wide range of other courses, seminars, conferences and study groups varying in length from half a day to one year on questions of technical teaching, administration, and industrial training. They provide research facilities, advanced courses of technical education studies, and extensive extramural programmes for their regions.

### Schools/Industry liaison

British industry frequently complains that schools show little understanding of the way industry works, and fail to prepare young people to meet its needs. In recent years there have been moves to acquaint the teacher more closely with industry. Most, like the teacher fellowships offered by the Institution of Mechanical Engineers, are of very recent origin while another operated by the Confederation of British Industry has been in existence for fifteen years. Although not strictly training measures, these periods spent in an industrial or commercial environment are expected to bring about benefits through teachers' better knowledge of the expectations of industry.

### Training Opportunities Scheme (TOPS)

An area of cooperation at government interdepartmental level rather than a local schools/industry level which has grown in recent years is the increasing government funding through the Manpower Services Commission (MSC) for courses for the unemployed or those wishing to acquire a new skill. These

Source : BIBB, Berlin (West).

<sup>1</sup> Royal Society of Arts.

courses, collectively known as the Training Opportunities Scheme (TOPS), are being run in the colleges of further education whose own finances are met by another government department, Education and Science.

According to *TOPS Review 1978* the colleges now carry the bulk of TOPS training, particularly training for office work. The review explains that during the period of TOPS expansion it was possible to make use of spare capacity in further education colleges. Opportunities for doing this in the future are likely to be much more limited; with a few local exceptions, colleges providing non-advanced courses are now full. Moreover many colleges will not be able to provide additional courses under TOPS unless further capital provision is made. The review recommends that TOPS should in future be enabled to give grants for (a) temporary accommodation for minor capital works designed to make existing accommodation effective for TOPS purposes; and (b) permanent facilities in special cases where a high priority training need has been identified, e.g. for particular types of technicians.

## Skillcentres

Formerly government training centres, skillcentres now number 68. They have developed primarily as providers of craft-level off-the-job training, though they have increasingly in recent years provided training at the semi-skilled level and in connection with experimental courses for young people and adults. Courses offered at skillcentres are funded from TOPS so that trainees receive allowances for the period of training from the MSC.

Their instructors undergo a rigorous training. The instructor force is recruited from craftsmen with a minimum of five years of industrial experience, who are then tested for broad-based capacity in their trade. There are two instructor training centres, one at Letchworth, Hertfordshire, and one at Hillington, Glasgow. Trainee trainers undergo at one of these centres a month's induction including a two-week techniques of instruction course. After three months of on-the-job training they return for a further period of off-the-job instruction, including a period of instruction under an instructor from the training-within-industry unit of TSD.<sup>1</sup> A further three

months as trainee instructor, is followed by a final off-the-job session. As techniques develop and technologies alter working methods so retraining courses are offered to qualified instructors.

Though it has been possible to meet the main needs of expansion since 1972 through recruitment to the permanent force and though the class-contact hours of TSD instructors are greater than in most comparable institutions, there is a serious shortage of instructors. About 10% of total skillcentre capacity is currently unoccupied because of this. (*TOPS Review 1978*.)

## Youth Opportunities Scheme trainers

A new scheme for instructor/supervisors recruited under the Youth Opportunities Scheme and similar programmes of the Manpower Services Commission is being offered on a pilot basis during 1979 and 1980 at ten centres, including the two instructor training centres. Consultation has taken place during the period of the scheme's development with the Manpower Services Commission and the pilot schemes are being monitored jointly by the Institute and MSC.

The course is of 75 hours' duration, with an equivalent amount of time spent in on-the-job practice. It is designed to provide instructors with competence in five basic areas of skill, namely counselling/caring, instructional techniques; communication; evaluation; and core competences and will be sufficiently flexible in operation to cater for regional variations in the skills levels of instructors, industrial backgrounds, and nature of workshops provision.

The assessment leading to an award is on a profile basis, measuring the student's achievement in the basic skill areas.

An essential feature of the pilot scheme will be its exploratory nature. In addition to course content and nature of assessment, the title of the scheme and the possibility of a joint CGLI/MSD award for students successfully completing the course will be investigated.

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Source: BACIE, London.

## Italy

# Training of trainers – a pilot project

One of the institutional tasks of ISFOL in the field of education is that of conducting didactic pilot projects and providing technical assistance in the trainer training field to the regions and to relevant public authorities.

In its early years ISFOL launched a major effort directed towards the environmental sensitization and the updating of technical, pedagogic, and methodological knowledge and skills of trainers in the field of vocational training.

Work in this direction has now been concentrated on specific medium- and long-range pilot projects involving recurring training. Of particular interest is a technical education project. This project, organized and managed by ISFOL in collaboration with the Department of Lower Secondary Education of the Ministry of Education, falls within the framework of pilot projects envisaged under the Resolution of the Council of EC Ministers of Education on transition from education to working life of 13 December 1976.

These project measures, which were further delineated in subsequent studies, were aimed at identifying points of approach in connection with the launching of an action programme capable of strengthening the relationship between training and the labour market within the framework of ongoing structural changes.

One such point of approach was without doubt the problem of teachers in terms of aligning their professional education more closely to knowledge and skills required to establish a positive relationship with the working world. The studies

<sup>1</sup> Training Services Division of the MSC.



showed that neither the volume and orientation of the subject content nor the methodology of instruction in the schools were adequately geared to a usage of communication channels between education and working life.

Concepts governing the art of teaching have rekindled a number of educational dualisms based on the devaluation of manual worker tasks, including qualified tasks, *vis-à-vis* knowledge worker tasks, particularly within the sphere of the humanities.

The estrangement of many teachers from the working world and the lack of any contact other than that at strictly didactic level served to aggravate still further a situation in which humanistic subjects took precedence over scientific-technical-occupational subjects, and this problem is still calling for solution.

Such an approach could appear quite monochromatic were it not for the fact that it also brings to light the extreme diversity in terms of both structure and educational orientation which is typical of the school systems of the EC Member States. On the other hand it would be misleading to maintain that a pragmatic approach or the placing of emphasis on scientific and technical subjects would by itself suffice to bring into being a 'labour-oriented' school system.

The lack of homogeneity at European level does in fact bring the various facets of the problem into focus by placing particular emphasis on the significance of subject blocks as indicators of the equipment required at school level in order to interrelate learning content more closely with socially desired activities in the working world.

The Italian case appeared to be significant for this first problem situation in that the privileged role enjoyed by humanistic subjects and the inadequate quality and volume of scientific and technical subjects taught provided very little fertile ground for a linking of school learning to the world of work.

Departing from these considerations it becomes evident that the scarcity of technical subject matter and the reduced volume of training in basic vocational skills, not to mention complete operative skills, devolved precisely from the failure to provide school instruction in basic technology. Such instruction leads to an awareness of the scientific and technological aspects of life and the en-

vironment; this can be decided advantage in working life later on.

The accepted approach to the teaching of scientific and in particular technical subjects was in no way suited to the task of awakening the interest of the adolescents and equipping them to come to terms with the technological reality of their environment. On the contrary, training in technical skills was considered to be tantamount to training in manual skills, which naturally ranked below instruction in the humanities.

The purpose of the teacher project is therefore to contribute towards modifying the lower secondary school curriculum in the direction described.

The specific conditions characterizing the Italian situation make it necessary to start with efforts to introduce a specific discipline of technological character, namely, technical education. This constitutes a valid point of departure for the realization of proposed reforms of school curricula which would place greater emphasis on vocational training and introduce a different social scale of value to work.

The educational guidelines of such a generalized project are aimed not simply at achieving a reevaluation of manual work but rather at systemizing fundamental concepts which will enable the pupils to understand their technological environment, establishing a more favourable basis for the provision of vocational guidance, and providing a good educational foundation and a link to the working world. Within the mentioned technico-scientific context subject content, which ranges through various scientific disciplines and manifold forms of practical application of the knowledge acquired, takes on paradigmatic character.

Such an approach clearly calls for and at the same time promotes the identification of areas of commonality between scientific disciplines themselves and between them and history and geography, from which basis it will be possible to ferret out the social connotations of man's technological activity as an expression of the organic reciprocity of man and nature.

The objective of interdisciplinary approach, career orientation, and vocational skills acquisition would then be directly linked to a knowledge of technologies seen as the product of human

effort and would stimulate progress towards improving the social status and enhancing the value of skilled work.

The role of a teacher of technical education would be that of organizer and stimulator of knowledge derived from the phenomenological observation of actual experience in which application of the various technico-scientific paradigms comes into play. Later on he should explain the underlying theory involved.

The project for teachers of technical education, organized by ISFOL in cooperation with the Ministry of Education, is being run at the ISFOL Centre for Didactic Experimentation and the Production of Audiovisual Instruction Material in Albano Laziale. It has a three-year time span and involves a sample group of 100 teachers of technical education coming from various regions of Italy, divided into two subgroups of 50 persons each.

The objective of this project is to work along the lines described above. The participants attend within a three-year period six seminars devoted to training and experimentation in subject matter of varying technical content selected from various disciplines, with a concrete problem inherent in objects and materials of everyday life serving as the point of departure. Through the accumulation of content-specific and methodology-specific input which the teachers use for teaching purposes during their period of teaching activity between each seminar this objective is realized.

The decision to repeat the seminars and to use an interdisciplinary approach was dictated by the need to identify technical fields and spheres of technological application which are best illustrative of the technico-scientific paradigms and also by the need to enable the participating teachers to deepen their knowledge and skills in as large a number of technical fields as possible.

A further objective of the project is the production of multimedia material and software for technical education instruction in order to achieve as broad an impact as possible outside the circle of the participating teachers.

For the presentation of the technical subject matter the method of dealing in a learning unit with a specific problem complex or project need from an interdisciplinary approach has been adopted. A learning unit is to be understood as a

well-rounded learning experience involving specific subject content.

In this sense the learning unit, in addition to functioning as a self-contained element of technical education curriculum, can, when the project moves on to broader application, become a model for a specific type of learning which can be inserted in a teaching plan according to the pupils' level of knowledge and degree of motivation as determined by their social and geographical background, the curriculum level involved, and the extent to which the interdisciplinary approach has been introduced.

Once the project has been completed the learning unit can be used in experiments of various types as concrete didactic material.

The realization that the learning unit must have the technical characteristics of a work instrument which is transferable and generally applicable gave rise to the decision taken during the project to devise a sufficiently homogeneous framework which could serve as the basis for successive adaptations of the methodology. This realization led to the elaboration of a methodological framework which outlines in synoptic form the process of learning unit design and experimentation in actual contact with the pupils.

This framework calls for identification of the general objectives of the learning unit, entrance requirements which the pupils must meet, and scientific prerequisites involved in determining the paradigmatic contents and introduces a series of working phases differentiated according to methodology, teacher and pupil attitudes, instruction materials, learning objectives, and duration.

Mechanical engineering, electrical engineering, urban planning dairy industry, and information science were dealt with first in order to relate with the classical fields of application in a concrete way. Topics based on the technical knowledge acquired, for example information science, as a means of understanding organizational processes and information flows, and still others derived from overlapping of various scientific fields as an expression of social life, for example technology and urban planning, were also treated.

As stated, the three-year project comprises six seminars for each of the two groups. Up to now three seminars have

been conducted. The first two seminars served to consolidate the subject content, after which in the third seminar a methodological-pedagogic understructure shaped to the specific requirements of technical education was designed.

By means of this methodological understructure the consolidation level of the technical subject content could be sufficiently secured to warrant insertion of the learning unit in the school curriculum, although, in confirmation of what was stated above, no particular interest in these experiments has been expressed on the part of the schools.

With the methodological-pedagogic understructure, furthermore, a useful contribution could be made towards eliminating resistance to a new form of knowledge and know-how transfer. In particular the methodological approach to the determination of learning goals, teaching planning, and performance appraisal (as a constant quality control of instruction) have provided the participating teachers with a tool with which to flexibly adjust the learning-unit structure to pedagogic requirements.

Now that the first project phase has been completed there are reasonable grounds for stating that the most important result has been a positive change of approach in the teaching profession, although it is still too early to know whether or not this development will be of a long-lasting nature.

This change of approach is clearly reflected in the learning unit in terms of assimilation of technical subject content, further refinement of work techniques and instruments, and the direct and comprehensive treatment of paradigmatic contents via a repeated interdisciplinary mix, which latter constitutes the very foundation of knowledge-interpretation-action in a world whose social structure is now shaped by technology.

I would now like to return to the main objective of the project, namely, that of providing teachers of technical education with a qualification which will enable them to orient the subject matter content of lower secondary schooling more directly towards the working world.

The next three seminars will deal with the problem of achieving the necessary homogeneity as regards teachers in the extremely divergent types of schools and

establishing the subject content of technical education. The following steps will be taken:

- deepening of subject content within its logical and time-schedule-specific relationship to the learning-unit curriculum;
- expansion of the technological horizon via study of production-specific aspects and related organizational structures (work organization, production costs, raw materials, installations, wage costs) and technologies involved in distribution and consumption; examination of the social role and historical development of the technologies dealt with. All this subject matter can be drawn together in the curriculum subject 'Technical Products and Human Society';
- explanation of technology as the product of human labour in the broadest sense of the term, i. e. comprehension and action (work as performance), for the purpose, as repeatedly emphasized here, of eliminating the distinction drawn between blue-collar and white-collar work - an important goal of technical education
- and stimulating a theoretical awareness of the technical philosophy which has accompanied technological change and in general determined the degree of awareness of the relationship between the productive life of man and the technological apparatus;
- further consolidation of methodological knowledge and skills by means of experimentation in didactic planning or treatment of curriculum planning factors.

It is important to stress that in the next phases the interim periods between the seminars will involve generalized, standardized experiments, the purpose being to obtain the necessary feedback.

The project is being run under the joint management of a staff officer of ISFOL and a representative of the administrative management of the Ministry of Education. Supervision of the project is in the hands of a scientific council composed of experts from the field of science and technology, school policy experts, teachers, and representatives of the Ministry of Labour, the Ministry of Education, the regions, and the employers and employee organizations.

## Netherlands

# A new approach in training trainers – more occupational pedagogy in the future

## From education to working life

In spite of constant efforts to render the transition from education to working life as smooth as possible, the situation in the Netherlands is still such that most young people entering the labour market for the first time find themselves confronted with a completely new situation. Since the value of learning on the job has been increasingly recognized, various approaches to the problems involved are now under way.

Under existing apprenticeship legislation young people have the possibility of undergoing training. If they do not enter an apprenticeship, they may either undergo training at an in-firm training workshop or learn under the guidance of an older, experienced co-worker to master their required job skills as rapidly as possible. Thus the spectrum of training offers for young workers ranges from an introductory on-the-job period of skills training on to systemized vocational training leading to a recognized certificate of qualification.

Although these variants differ widely, they have commonalities. They all require of the young workers that they bring with them a desire to learn and of the trainers that they possess the necessary knowledge and skills qualification. In order to discharge their training tasks properly, however, the trainers must possess other qualifications as well. It is important, for example, that they deepen their knowledge of methods and techniques of skills transfer and trainee supervisor and gain deeper insight into factors which hinder or foster the learning process. Ability to develop the personal attributes of their trainees and to take into account and adjust to changes in the general and vocational education in the Netherlands is also of prime importance. Up until a short time ago these didactic aspects of training were greatly neglected.

## A first effort

In the light of this need efforts began as early as 1971 to develop courses for the training of trainers. With the approval of the Ministry of Education and Science the Pedagogical Centre for Industrial Vocational Training launched two pilot courses for 16 participants each in 1972.

The training of trainers falls under the responsibility of the Netherlands Association for the Training of Vocational Teachers (NGOLB). Vocational training organizations and organizations of business and industry (teacher associations, employer organizations, employee organizations, and apprenticeship bodies) are joined together in this association, the goal of which is to better prepare and equip intending trainers for their training tasks both within and outside the scholastic training system.

NGOLB is of the opinion that the full-time and part-time trainers in the Netherlands, estimated to total 35 000, are not sufficiently informed on available trainer training opportunities. One of the reasons for this may be that in-firm trainers are practically isolated in their respective firms whereas vocational teachers can be reached through their professional organizations.

## Training course

### RESPONSIBILITY, OBJECTIVES, AND ADMISSION REQUIREMENTS

It is assumed that each firm (included under this term are public enterprises as well) has a training responsibility towards its young workers. In order to meet this responsibility the firm must have in its employ a pedagogically qualified trainer and/or supervisor.

The purpose of training for trainers is to transmit the necessary pedagogic and work organization-specific knowledge and skills to the in-firm trainer.

One of the characteristics of this new type of training is that it over-arches several production branches, in contrast to courses for masters in apprentice firms which have been available in the Netherlands ever since the 1950s. These courses for masters are financed by subsidies from the Ministry of Education and Science, with each course being geared to a specific production branch.

Eligible for this new type of trainer training is every employee for a firm who is charged with the task of providing training for a specific occupation or job activity. In other words, trainers, supervisors and masters from any occupation and any economic branch can be accepted for training. The only requirement is that within their firm they are engaged on either a full-time or a part-time basis in providing in-firm training and that they possess a recognized certificate or equivalent qualification in the occupational field in which they train.

Entrance priority is given to persons who train or supervise primarily young people up to 30 years of age and to persons who, having met the admission requirements, applied for admission before but could not be accommodated.

The sending firm or institution must agree to release the participant for each block of the training course (six times, each for four days) and give him/her the opportunity to carry out practice instruction in the firm one or more times. The two-year course consists of an introductory period and five training blocks plus meetings following the close of the course.

## Subject matter, methods, implementation

The subject matter of the two-year course is spread over the five training blocks. The first two blocks dealing with psychological and pedagogical aspects respectively take place during the first year. The remaining three blocks dealing with in-firm organizational aspects, pedagogical aspects, and aspects and problems of instruction structure respectively take place during the second year. A broad selection of subject matter is thus offered which in its totality constitutes suitable methodological understructure for in-firm vocational training.

Various methods are adopted in order to achieve the desired learning goal. The learning process involves four phases, namely, skill transfer, skill comprehension, skill application, and skill integration, with each phase having its own working method. Thus in addition to the transfer of specific knowledge and skills ability to apply that which has been learned to actual practice and psychological aptitudes such as willingness to make full use of this ability are schooled. For this two-year course NGOLB employs

four full-time teachers, all of whom have completed teacher training at university level and whose special field is either didactics or social pedagogy.

**Participants, tuition, finance basis, and official recognition**

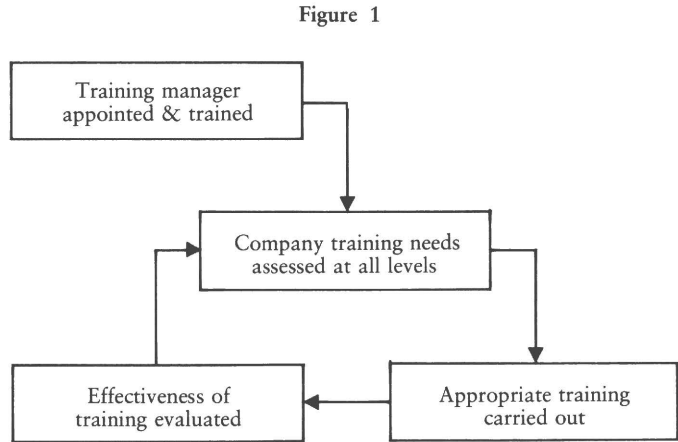
Participants are persons who meet the abovementioned admission qualifications. Training is characterized as continuing training. The State, which subsidizes this training, has limited the number of participants to 96 a year. A tuition fee amounting to HFL 175 a year must be paid by the participant.

The costs of training, which until now have been carried by the Ministry of Education and Science as a special *ad hoc* expenditure, amount to HFL 580 000 a year. However, the financing modality is soon to be definitively regulated. This will mean that this type of trainer training, which has greatly helped young people to master the transition from education to working life, will move out of the experimental stage and come to enjoy official recognition as a regular training course.

cover all manufacturing and construction industries.

In each of the levy/grant schemes, the establishment of the training function is seen as the first step in the development

of in-firm, training, and the training manager is regarded as a vital component of this. The development of training is seen as a cyclical process, and the planned sequence of events connected with training is shown in Figure 1.



The need to train industrial personnel in the skills required to manage training was recognized at an early date, and the Irish Management Institute has operated

a Training Manager Training Programme since 1970, in conjunction with AnCO. The basic format of the course is set out in Figure 2.

Figure 2

	Duration	Main topics	Outline content
Module 1	4 × 4 days	The assessment of training needs The implementation of training programmes	Practical project work Training techniques Operator training Supervisory training Management training Manpower planning Costing of training
Module 2	10 days	The organization of learning Supervisory and management development The training manager and organizational changes	How people learn Learning objectives and validation Participative learning Supervisory and management development Programme design Appraisal Setting programme objectives Coaching and counselling techniques Organizations as systems Collecting information Diagnosing company problems Survey techniques Influencing and consulting skills Group behaviour Career planning

Source: SER. The Hague.

*Ireland*

**Training of trainers – project work as a method**

The systematic organization of training for trainers in Ireland commenced in the late 1960s when AnCO – The Industrial Training Authority – was established. Under the 1967 Training Act, AnCO has the responsibility for the promotion of training for all activities of industry. Since its establishment AnCO has considered that each firm is responsible for training its own work force and has designed its own training programmes outside companies so as to complement training within industry. In addition, AnCO has encouraged the development of training within firms by means of levy/grant training schemes which now

Over the years emphasis on carrying out practical projects as part of the course has increased in an attempt to assist the transfer of ideas from the lecture room to the work situation. A difficulty with the course is that many managers attend the first module only, thus lessening the benefits of participation in the programme. To date, about 800 managers have completed Module 1, which compares favourably with the figure of approximately 1 000 firms employing more than 50 people. In overall terms, it is estimated that more than 80 % of the industrial workforce is employed in firms with an established training function.

### Training in small firms

Since firms employing between 20 and 50 people are unlikely to have sufficient training to justify the employment of a full-time training manager, the AnCO levy/grant schemes have been modified in these cases to encourage the employment of a training executive who would have functions other than training. The approach to the training of these executives can be exemplified by a programme provided by the Clothing and Footwear Industry Training Advisory Services of AnCO. Many of the firms in the Irish clothing industry are owner-managed, and it is impractical to think in terms of five weeks' ex-factory development for the owner-manager of such a firm. The Advisory Service's programme provides, in two modules of two days each, for this situation. The fact that all the participants are from the same industry facilitates a concentrated input, and the sessions have practical reference to the routine problems of training in a small firm and of availing of assistance provided by AnCO and other bodies. This programme does not pretend to produce professional trainers, but does much to create acceptance and appreciation of training as a management tool.

### Training instructors

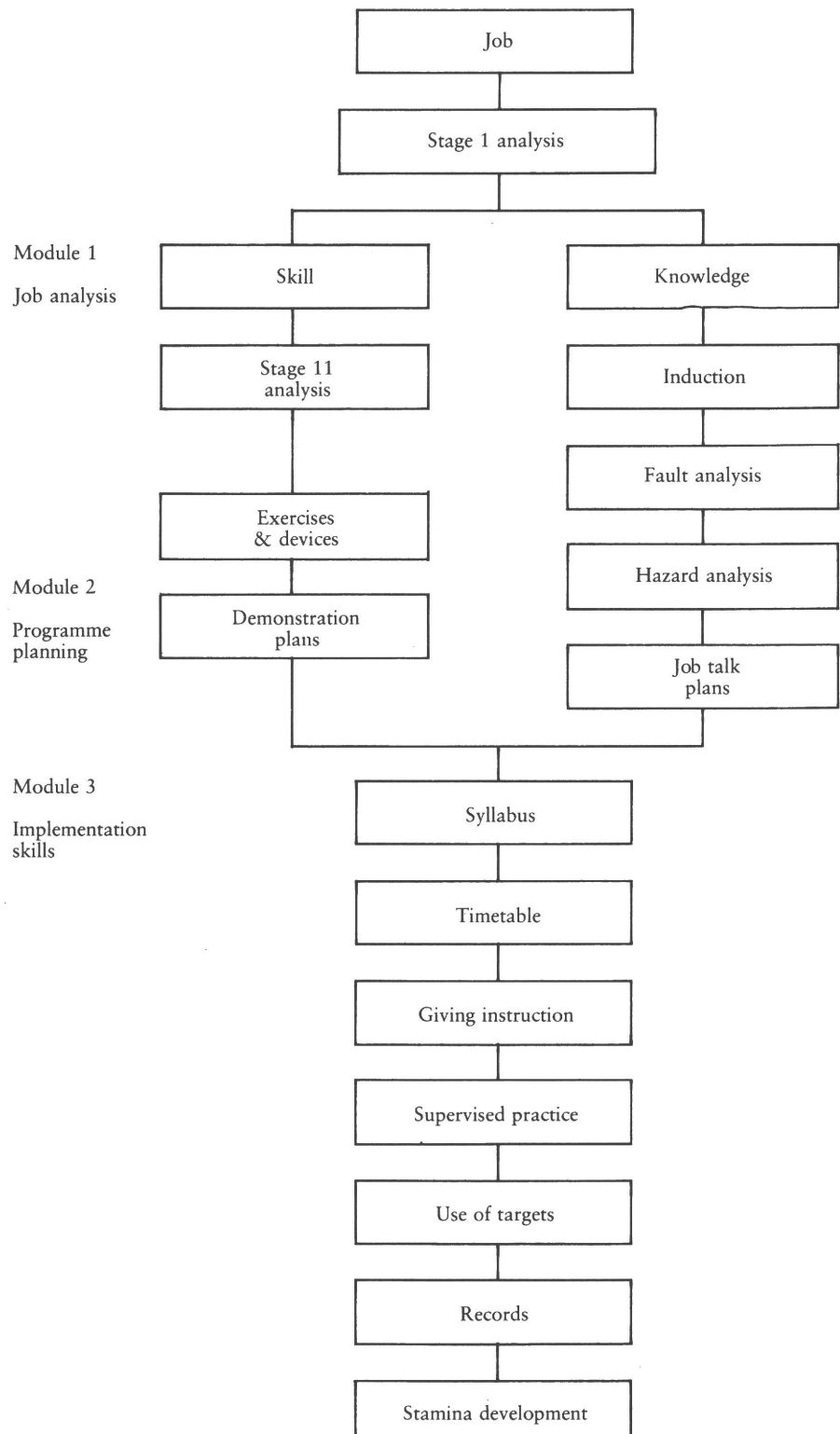
So far we have been considering the training manager/executive purely as an organizer rather than as a face-to-face trainer. No such exclusion is intended, but in practice training managers have needed to employ specialist instructors for particular areas of training, e.g. operator, clerical, apprentice, supervisory, etc. The use of instructors is most

widespread in the operator area because of the volume of work involved, and potential instructors are usually people with prior operator skills in the jobs in which they will subsequently instruct others. In particular areas where the volume of work does not justify a full-time instructor, it is normal to train a supervisor or leading hand in instructional techniques, so that they can be

called upon to train when the need arises.

The first instructor courses dealt with training of operators for repetitive industries and took the form of a four-week block course. The first two weeks dealt with job analysis and programme design, the third week involved project work in their own firms, and the final week was

Figure 3



devoted to instructional techniques. A follow-up visit was made by the course tutor to each participant during the third project week and again after the completion of the course.

This arrangement proved unsatisfactory for four main reasons:

- The participants were unfamiliar with the learning situation and found it difficult to assimilate four weeks of concentrated input;
- The firms tended to send their best operatives, who were then confronted with a backlog of work which had built up in their absence rather than being free to engage in training;
- The course did nothing to establish the role of the instructor as a trainer within the firms;
- It was not possible for the course tutor to spend sufficient time with participants during their project week, due to the numbers involved and the distances travelled between firms.

Based on these findings the course was then changed to a modular form involving three separate course weeks, with a three-week project period between each. A follow-up visit was made by the course tutor after each of these modules to appraise the completed project work and stimulate any further action considered necessary.

The modules are shown in Figure 3.

The three-module course has undergone a number of significant changes since it was introduced. In the initial courses some participants experienced great difficulty in completing the job analysis successfully, and it became necessary to simplify the approach. In-depth method analysis is now only encouraged where the high skill content of the job demands it. The main emphasis now is on recording the elements of each operation in sequence, together with any relevant key points. This has resulted in a greater proportion of participants completing their projects successfully without requiring further assistance from tutors.

Another difficulty encountered was that some participants failed to get operative training off the ground in their own firms because of lack of confidence in their own ability. Practical workshops have now been developed to give participants supervised practice in planning a complete training programme and later implementing it.

Successful implementation of training by instructors in their own firms depends greatly on the level of knowledge the

training manager has of operative training and the amount of support he actually gives it. To this end participants are trained through role play and similar exercises to brief the training manager and other relevant personnel they intend to influence in order to gain the support required to make training a success.

The modified approach has proved extremely successful because:

- The project work allowed the participants to reinforce through practice the learning gained on each module;
- The follow-up visits by the tutor removed any fear of being unable to complete the project work and enabled the tutor to support the participant in explaining to management what was being proposed;
- The nature of the programme allowed the instructor to establish himself gradually and thereby avoid the negative pressure of being perceived by both management and the workforce as an 'expert' returning from a four-week course;
- At the end of the course the participant had an amount of analysis work completed and was in a position to get involved with trainees.

Source: AnCO Dublin.

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