

ED 022 002

VT 004 508

By- Martin, Victor

ACCELERATED VOCATIONAL TRAINING FOR ADULTS, A COMPARATIVE STUDY: OBJECTIVES, ORGANIZATION, SYLLABUSES AND METHODS, FUTURE PROSPECTS.

Organisation for Economic Cooperation and Development, Paris, (France).

Pub Date 65

Note- 127p.

Available from- OECD Publication Center, Suite 1305, 1750 Pennsylvania Avenue, Washington, D. C. 20006 (\$2.00)

EDRS Price MF-\$0.50 HC Not Available from EDRS.

Descriptors- *ACCELERATED PROGRAMS, *ADULT VOCATIONAL EDUCATION, *COMPARATIVE ANALYSIS, *FOREIGN COUNTRIES, JOB TRAINING, *MANPOWER DEVELOPMENT, PROGRAM ADMINISTRATION, PROGRAM DESCRIPTIONS, SKILLED WORKERS, TEACHING TECHNIQUES, TRADE AND INDUSTRIAL EDUCATION, TRAINEES, TRAINERS

Identifiers- Accelerated Vocational Training, AVT, Belgium, France, Great Britain, The Netherlands

The program of Accelerated Vocational Training (AVT) for adults in France, Great Britain, The Netherlands, and Belgium, originally developed mainly in the basic manual crafts of building and metalwork, is now covering more occupations and is intended to develop trade skills to a level of qualification comparable, if not equivalent, to that which could be acquired through apprenticeship or in training schools. Unlike traditional vocational training, which tends to give the worker a training of long-term value, the AVT program is closely linked with the problem of short- or medium-term employment. The AVT courses are an average of 6 months in length, reserved for adults, and supplement the traditional systems which provide vocational training for the young. In 1962, the International Labor Conference devoted the main part of its "Recommendation of Rapid Training" to the enumeration of principles for AVT training and methods. Some of the principles include establishing an AVT syllabus which provides for preparatory training based on taking one difficulty at a time compatible with the knowledge or skill already acquired, a range of exercises in increasing order of difficulty, a synthesis of exercises carried out in conditions as similar as possible to those of the work or factory, and application of exercises to facilitate the transition between theoretical and actual work. (HC)

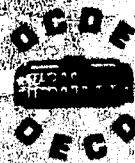
VTCC4508

MANPOWER AND EMPLOYMENT

ED022002

VICTOR MARTIN

**accelerated
vocational
training
for adults**



ORGANISATION FOR ECONOMIC
CO-OPERATION AND DEVELOPMENT

PARIS 1965

2 VICTOR MARTIN
U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

accelerated vocational training for adults

1 A COMPARATIVE STUDY.
Objectives - Organisation - Syllabuses and Methods
Future Prospects

ORGANISATION FOR ECONOMIC
CO-OPERATION AND DEVELOPMENT

The Organisation for Economic Co-operation and Development was set up under a Convention signed in Paris on 14th December 1960 by the Member countries of the Organisation for European Economic Co-operation and by Canada and the United States. This Convention provides that the O.E.C.D. shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the world economy;*
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development;*
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.*

The legal personality possessed by the Organization for European Economic Co-operation continues in the O.E.C.D. which came into being on 30th September 1961.

The members of O.E.C.D. are Austria, Belgium, Canada, Denmark, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

TABLE OF CONTENTS

PREFACE	7
INTRODUCTION	9

Chapter I OUTLINE OF A.V.T.¹

A. THE CONCEPT	13
B. BRIEF PANORAMA OF A.V.T. IN THE COUNTRIES CONSIDERED	14

Chapter II THE OBJECTIVES OF ACCELERATED VOCATIONAL TRAINING

A. THE VARIETY OF PRESENT OBJECTIVES	19
B. EVOLUTION OF THE DEMAND FOR TRAINING AND OF THE METHODS OF VOCATIONAL TRAINING	25
C. THE NECESSITY OF AN A.V.T. TRAINING SYSTEM AS A POLICY WEAPON FOR RESTORING BALANCE TO THE EMPLOYMENT MARKET	29
D. PURPOSE AND SCOPE OF THE PRESENT STUDY	31

Chapter III A.V.T. SYLLABUSES AND METHODS

I. THE BACKGROUND OF RECRUITMENT	35
II. GENERAL METHODOLOGICAL BASIS	36
III. THE SCOPE OF A.V.T. SYLLABUSES AND THEIR PREPARATION	37
IV. SETTING OUT THE EXERCISES OF A SYLLABUS AND METHODOLOGY OF TUITION	44
a) Documents required for a syllabus	44
b) The pedagogical principles of the vocational training of adults	46
c) Group or individual teaching. The corollary to group or staggered intake	48
d) The various stages of the course	50
e) Additions to syllabuses and methodology	51
V. CRITICAL APPRECIATION OF SYLLABUSES AND METHODS USED IN THE DIFFERENT COUNTRIES	52

1. See : Explanation of the initials used in the report, p. 8.

Chapter IV
INSTRUCTORS AND TRAINEES

I. CONDITIONS OF APPOINTMENT OF A.V.T. INSTRUCTORS	57
II. TRAINING OF INSTRUCTORS	59
III. RECRUITMENT AND SELECTION OF TRAINEES	62
IV. ADVANTAGES GRANTED TO A.V.T. TRAINEES	67

Chapter V
A.V.T. MANAGEMENT

I. ADMINISTRATIVE ORGANISATION	71
II. REQUIREMENTS FOR A.V.T. ADMINISTRATION	73
III. CENTRE MANAGEMENT	75
IV. RECRUITMENT OF CENTRE MANAGEMENT STAFF	76

Chapter VI
DIVERSITY AND EFFICIENCY OF A.V.T.

I. STANDARDS AND SCOPE OF A.V.T.	79
II. REHABILITATION OF HANDICAPPED WORKERS	82
III. TYPES OF A.V.T. TRAINING	84
IV. ACCELERATED TRAINING IN FIRMS	87
V. PLACEMENT OF TRAINEES	93
VI. IS A.V.T. A « SECOND-RATE » TYPE OF TRAINING ?	98

Chapter VII
THE OUTLOOK FOR A.V.T.

I. PRESENT-DAY TRENDS IN APPRENTICESHIP, ESPECIALLY IN THE UNITED KINGDOM	105
II. TRENDS IN VOCATIONAL TRAINING	109
III. VARIOUS PROBLEMS CAUSED BY TRENDS IN VOCATIONAL TRAINING.	111
IV. CONCLUSIONS : PROSPECTS AND DESIRABLE REFORMS	112

ANNEXES

I. International A.V.T. action	117
II. <i>Table A.</i> Number of persons who have received A.V.T. group training in 1963	123
<i>Table B.</i> Breakdown of group training according to the managing authority	123
III. Various advantages granted to trainees in the group training centers directed by the A.V.T. managing authority	124
IV. Comparative estimate of cost of A.V.T. training courses according to country	127
V. Certain opinions expressed by trade organisations in the Netherlands on the work of adult training centres	131

PREFACE

The Manpower and Social Affairs Committee of the O.E.C.D. seeks to promote an « active manpower policy », that is to say a whole series of measures forming part of an overall economic policy, based on growth and aiming at adapting the labour market more easily to technological and structural changes.

One of the most important aspects of an active manpower policy is to ensure, that the resources represented by the working population are utilised in such a way, that the rhythm of economic growth and technical progress is not halted by a scarcity of workers possessing the required level of skill. A good basic education and a good technical training together provide the best way of enabling workers in the future to adapt themselves to the requirements of modern technology. However, technical evolution is of such a nature as to make it certain that, an increasing proportion of the population will have to change jobs during their working life. In this context adult vocational training takes on a special importance.

Monsieur V. Martin, Director of A.V.T. in Belgium, agreed to prepare the following report at the request of O.E.C.D.; in it he describes the steps taken in certain countries of Europe to promote the training of adults by using methods described as « accelerated ». In his conclusions the author, who emphasises that he accepts full responsibility for the theories he puts forward, underlines not only that A.V.T. should obtain full acceptance in highly as well as less industrialised countries, but also that the principles which underlie it should form the basis of a vocational training policy designed to meet the requirements of 20th Century economics.

EXPLANATION OF THE INITIALS USED IN THE REPORT

- A.V.T. Accelerated Vocational Training for Adults.
O.E.C.D. . . . Organisation for Economic Cooperation and
Development.
A.N.I.F.R.M.O. Association Nationale Interprofessionnelle pour
la Formation Rationnelle de la Main-d'Œuvre
(Supervisory body for A.V.T. in France, to a
great extent autonomous, under tripartite
management).
G.T.C. Government Training Centres.
(Centres for A.V.T. in United Kingdom, directly
under the Ministry of Labour).
I.R.U. Industrial Rehabilitation Units (attached to
G.T.C.'s in the United Kingdom).
O.N.Em. . . . Office National de l'Emploi.
(Body directed by a Board, under the Ministry
of Labour, responsible for the administration
of unemployment benefit, placement and A.V.T.
in Belgium).
T.W.I. Training Within Industry.
I.L.O. International Labour Office (Geneva).
CvVV. Centres for A.V.T. in the Netherlands, under the
Ministry of Social Affairs.

INTRODUCTION

The present work constitutes a comparative study of the methods and aims of accelerated vocational training for adults in four countries in Western Europe, namely, France, Great Britain, The Netherlands and Belgium. Now and again it will mention certain achievements and concepts prevalent in other countries, where these appear to be particularly characteristic.

We believe that such an analysis is opportune at a time when, in many countries, the traditional methods of vocational training are being re-considered. Faced with the economic expansion and the structural transformation caused by the creation of new undertakings and the disappearance or technical conversion of old units of production the leaders of each nation are not content with trying to make up the deficit in skilled technical workers which is evident at many levels in different sectors.

The problem raised is to-day one of national and international concern, for the authorities, for management, for the leaders of professional bodies, for the Trade Unions themselves and even for youth organisations. It expresses the anxiety felt about methods of vocational training which helped to build the industrial power of the Western nations, but whose growth belongs to an era now technically out-dated and which, like all deep-rooted institutions, may lack the faculty for rapid adaptation to the steadily advancing evolution of technology.

Accelerated vocational training for adults does not claim progressively to replace the traditional systems. But within the structure of vocational training as a whole, and more especially in the training of skilled workers, it plays a more and more extensive part. The motives or prejudices which had hindered its development in varying degrees in each of the four countries mentioned above are largely discredited to-day. Accelerated vocational training for adults (which we shall call A.V.T.) is being called upon to increase its field of action considerably, both in numbers trained and in variety of subjects.

The present work will by no means constitute a side-by-side description of the respective systems of A.V.T. in four countries. Such a description of the relevant legislation and regulations

and of the financial bases and structures of A.V.T. can easily be found in national publications¹.

It seems more fitting, after a summary review of present achievements, to analyse the needs which have recently come to light, the trends and preoccupations that can be discerned, the changing conceptions, the necessary re-orientations, the obstacles still to be overcome. Apart from the comparison of the systems of A.V.T. in four countries, the particular perspective in which A.V.T. may be viewed in countries of industrial underdevelopment will be analysed in annex nr. I.

The author wishes to thank several officials and experts in France, the Netherlands, the United Kingdom and Belgium and in particular Mr. J. M. Hillenius, Head of Service, Vakopleiding aan het Rijksarbeidsbureau, Ministry of Social Affairs and Public Health in the Hague, and also Mr. T.M. Iley, Deputy Chief Inspector, Training Department, Ministry of Labour in London, for the help and advice which they contributed during the compilation of this report.

**

The specialist whose daily task is to solve problems of A.V.T. will not find such an analysis of any use, except perhaps as a source of information on the solutions adopted by neighbouring countries to the problems with which he is faced. But the work is mainly intended for those who are directly concerned in this search for new solutions to the problems of skilled industrial manpower. May it reveal to them some new aspects of the matter which may help them in their daily work in the service of governments, undertakings, or the workers themselves.

In spite of the evolution of ideas imposed by necessity in the course of the last few years, A.V.T. has not been accepted everywhere, or to the same extent. It still encounters opposition and sometimes, even among promoters of A.V.T. there are differences of opinion, especially in regard to aims, means and methods. These differences, however, do not follow the lines of demarcation between philosophic, religious or political schools of thought.

Vocational training is a domain in which, for more than half a century, the efforts of governments, professional groups

1. The O.E.C.D. has, for its part, published, following an international seminar held in Paris in November, 1958, a document which includes a description of the A.V.T. system and its achievements in 11 European countries.

Although the situation has changed since then in several countries, one can refer to this for the important aspects. (European Productivity agency : « Accelerated Vocational Training »).

of employers and workers' unions have converged. There is a clash of methods rather than of interests ; this is a sufficient reason for not glossing over the opposing theories, objections and controversies in a matter which is not explosive as, for example, a wages policy would be.

Convinced as he is of the necessity for the progressive expansion of A.V.T. in countries already industrialised or becoming industrialised, the author accepts full responsibility for the opinions here expressed, in the hope that the controversy they may arouse will help to awaken interest and shed new light on problems, and perfect those institutions whose role it is to create a modern formula for vocational advancement.

Chapter I

OUTLINE OF A.V.T.

A. THE CONCEPT

Accelerated vocational training, rapid training, shortened training, adult vocational training, vocational re-adaptation or rehabilitation — such are or were the principal titles given to a system of training which, under government auspices or with its assistance, helps adult workers to acquire, in a few months, knowledge which may enable them to occupy posts demanding a certain level of qualifications.

A precise definition can rarely be satisfactory; moreover it has the disadvantage of arousing controversy, because each country may interpret this title differently or give it a different connotation, may wish to widen or restrict its scope or refuse to accept one of the terms included in the definition. For instance, the limitation of the scope of A.V.T. to adults or the method of « globalisation » used in devising the exercises of a syllabus do not constitute for everybody a distinctive criterion of A.V.T.

Rather than seek a precise definition and discuss its content, we think it preferable to enumerate a series of factors which have marked the development of A.V.T. in different countries and to set, in successive stages, the limits of the field covered by the present study.

1. A.V.T. is a kind of training which has developed fairly recently, mainly since the second world war, at least as an « institutionalised » system. Systematised training commenced in Great Britain after the first world war and was extended in the mid nineteen thirties. Elsewhere vocational training of limited duration — in comparison with traditional training systems — was established earlier in many countries but it was of a transitional, occasional nature, meant for the re-absorption of the unemployed, the rapid adaptation of workers from armament factories, or the preparation of future emigrants for new jobs in their countries of destination.

2. A.V.T.'s field of activity is closely linked with the problem of short or medium-term employment, unlike traditional vocational training, which tends to give the worker a training of

long-term value. This was originally based on the concept of an economy whose needs in the matter of skills were relatively stable over a long period. This close dependence of A.V.T. on the evolution of employment explains, in particular, why its development was sponsored and assisted by governments as an instrument of their policies. And more particularly, why it was placed under the authority of the Ministry of Labour rather than the Ministry of Education, although the problem was really one of teaching.

3. A.V.T. courses last a certain number of months, with a « general » average of six months, which constitutes an essential distinctive factor between A.V.T. and other shorter or longer forms of training.

4. A.V.T. developed mainly but not exclusively in basic manual crafts in Building and Metalwork. It tended to teach a real « trade » which could be followed immediately, with a certain level of qualification comparable, if not equivalent, to that which could be acquired through apprenticeship or in training schools.

5. A.V.T. is reserved for adults and supplements the traditional systems which provide vocational training for the young.

6. This training, limited in its duration, intended for a particular type of student and pursuing original aims, calls for a new methodology adapted to the subjects it teaches and the public it is to reach.

Some of the main limitations to which A.V.T. became subject in the course of its historical evolution, have tended to be left behind to-day. Its field of activity covers more and more new occupations — at least in countries which have taken the lead in this sector — and new aims are often assigned to it, such as social betterment.

We prefer to interpret the initials A.V.T. as « accelerated vocational training » although the pejorative meaning sometimes given to the term « accelerated » caused the expression to be abandoned by the French who created it. The term « Adult Vocational Training » adopted for some years by France, may well cause it to be confused with other forms of vocational training organised by the Ministry of Education or by firms, which are also intended for adults.

In conclusion, we may say that although the expression « Accelerated Vocational Training » may be criticised, it has the advantage of being the most frequently used term and the most easily understood to denote the subject of the present study.

B. BRIEF PANORAMA OF A.V.T. IN THE COUNTRIES CONSIDERED

In comparison with school or apprenticeship courses, A.V.T. has a comparatively small place in the whole range of

vocational training methods. In Great Britain, the Netherlands and Belgium, the number of trainees per year is limited to a few thousand.

In France, where A.V.T. has proportionally a much greater place and where the authorities intend its activity to double as from 1964, its field of activity is appreciably smaller than that of vocational education, even at its lower level of « C.A.P. » (certificate of vocational aptitude) or of industrial apprenticeship¹.

1. *France*

A.V.T. originated when Mr. Dautry, War Minister in 1939, decided to set up an institution for training rapidly the workers who would be needed in factories for the purposes of war. The institution set up at that time was ready from 1945 onwards to assume the task of rapidly training adult workers.

A.V.T., which was at first based on the need for reconstruction, quickly extended its activities to the Metallurgical sector.

The creation in 1949 of the « Association Nationale Interprofessionnelle pour la Formation Rationnelle de la Main-d'Œuvre » (A.N.I.F.R.M.O.)² paved the way for a very considerable development of A.V.T. in numbers and variety. A.N.I.F.R.M.O. is under tripartite management and enjoys considerable autonomy. Its activities are as follows :

- a) Direct control of about a hundred centres, each of which includes a certain number of sections and whose annual intake capacity was about 30,000 trainees in 1963.
- b) Supervision of private centres created by firms of trade organisations which can be approved and subsidised provided they adhere to the standards laid down by A.N.I.F.R.M.O. for the accelerated training of adults.

Apart from these activities, A.N.I.F.R.M.O. runs :

- a) the « Institut de Formation Professionnelle » (Institute of Vocational Training), which is better known as the rue Dareau Institute, and whose principal function consists in the training of instructors, and technical supervision, besides the drawing-up of syllabuses (progressions) ;
- b) the « Centre d'Etudes et de Recherches Psycho-techniques » (C.E.R.P.) (Centre of Psychotechnical Study

1. See in Annex II a comparative table for each country of the numbers who have received A.V.T. training during the last few years.

2. National Association for the Rational Training of Manpower for all Occupations.

and Research) which devises the tests on which is based the selection of instructors and trainees, in the different trades taught by A.V.T.

A.N.I.F.R.M.O. is supplied with funds by the Ministry of Labour, which controls it and gives general directives to guide its policies.

In France, A.V.T. is in principle, and has been since its origin, open to all candidates of more than 17 years of age, who wish to obtain advancement in their work and have passed the entrance tests.

2. *Great Britain*

The relatively minor development of accelerated adult vocational training in Great Britain can be explained chiefly by the fact that in recent years the categories of workers admissible for training have been limited to :

- a) Handicapped and disabled persons who are recognised and enrolled as such in the national register ;
- b) Ex-soldiers leaving the Forces after a period of several years' service ;
- c) Unemployed workers, when the necessity for their re-settlement by means of vocational training has been recognised.

Save in exceptional circumstances, such as obtained after the war, when demobilisation sent back into the national economy a large number of soldiers (who could be treated as volunteers, in certain respects) and partially disabled persons, these restrictive criteria for admissibility have limited the maximum number of annual trainees in the 14 Government Training Centres (G.T.C.'s) of Great Britain to 5,000. For each major centre there is an Industrial Rehabilitation Unit (I.R.U.) whose task is to give guidance for the re-settlement of the disabled by means of a process of observation lasting a few weeks.

The management of all the centres in Great Britain is directly dependent on a department of the Ministry of Labour in London. They work with the local Employment Exchanges, especially in recruiting candidates and finding jobs for those trained.

The British Ministry of Labour is however now expanding the G.T.C.'s in keeping with the needs of the labour market. Training is now offered to any suitable person over 18 years of age, without a usable skill wheter employed or not.

3. *Belgium*

For a great number of years the legal restrictions governing the recruitment of trainees hampered, in Belgium too, the

development of accelerated vocational training, to which, under the name of « vocational re-adaptation », until 1961 only unemployed workers in receipt of unemployment benefit were entitled.

Thus it had acquired a precarious, transitional character, which changed according to the variations of the economic situation, but always within the narrow field of a measure designed to assist in re-absorbing unemployed workers.

A very clear evolution of prevailing concepts has taken place in the last few years. This has favoured the development of the institution, whose scope was considerably broadened by legislation in March 1961.

The activity of the centres¹ has more than tripled in less than 2 years, rising from 1,500 persons trained annually to more than 4,000 in 1963.

A.V.T. works on a national, as well as a regional, scale as a service coming under the « Office National de l'Emploi » (National Employment Office), which is the successor to a body whose function was largely to administer unemployment benefit.

4. *The Netherlands*

As in Belgium, the Government Training Centres (Centra voor Vakopleiding van Volwassenen) were initially set up in the Netherlands for the re-settlement of the unemployed, but they had no connection with unemployment benefit proper, which was not a concern of the Rijksarbeidsbureau, one of whose responsibilities is however A.V.T.

Since it had to be informed whenever staff were dismissed, the Labour Office encouraged those who were temporarily without work to take a vocational training course.

The Government Training Centres thus provided part of the skilled manpower required to meet the needs of rapid industrialisation and of re-orientation of the Netherlands economy following the loss of the colonial Empire.

The numbers trained in Government Training Centres has nevertheless remained small in 1963 (circa 2,200). Since 1945 a total number of circa 60,000 adults completed their training.

In this country too a noticeable evolution in favour of the development of A.V.T. has taken place in those circles previously indifferent or hostile to it, where it was considered as a sort of « unfair competition » with the traditional training methods.

1. A rather curious terminology exists in Belgium, where the name « centre » is given to each of the courses, which elsewhere are called sections. To make international comparisons easier, we shall indicate by « centre » an entity grouping a certain number of sections each devoted to the teaching of a trade.

Chapter II

THE OBJECTIVES OF ACCELERATED VOCATIONAL TRAINING

A. THE VARIETY OF PRESENT OBJECTIVES

If, during the last few years, an evolution has taken place which is by no means complete as regards the part played by A.V.T., the accelerated vocational courses organised for the benefit of adult workers, in France, Great Britain, the Netherlands and Belgium have striven to attain, simultaneously although in varying degrees, several of the following goals :

1. *Re-absorption of the unemployed*

It had been observed that even at the most critical periods of economic depression, a certain number of posts for skilled workers could not be filled, in particular because the distribution of the skills acquired both under apprenticeship contracts and in school courses chosen during youth no longer met the needs of subsequent economic evolution. Alternatively apprenticeship in a great number of trades was simply given up by young people and there as no longer any « succession ». Thus A.V.T. generally originated in this need for facilitating the re-employment of a certain number of unemployed, who were directed to apprenticeship in the trades which had been neglected or in which there were shortages, according to the needs of the moment. For a long time its scope remained thus limited in many countries, especially in Belgium and Italy, and has not advanced beyond this stage in the Federal Republic of Germany in Austria, and in Norway and Denmark.

In this context it would appear logical to reserve access to this « vocational re-adaptation » for those who have been out of work for a long time, as it would be logical in a system of vocational rehabilitation for sick or disabled people to limit its activities to those who cannot be made economically productive by other means, and so generally to the most physically handicapped. Besides the economic and social considerations which

govern re-absorption, there is a financial factor, namely the cost of unemployment relief.

If we were to apply such a system strictly, we should have to reply, when asked « Who should be entitled to vocational re-adaptation ? » : « Those who, without this, cannot resume their former productive activity, even in the not-too-distant future ».

But, if such a conception was originally acceptable, it was due to evolve rapidly, by the very nature of things and under the influence of two main factors :

- a) Accelerated vocational courses can only be successful and efficacious if they teach « trades » in which industry shows a desire to absorb new elements. Now selection from workers who have been unemployed for a long time is often the reverse of « selection » : indeed, except in a period of heavy general depression, the best workers are not those who are idle for the longest periods.
- b) As long as the possibility of following re-adaptation courses is reserved to a small number of trainees, there will be no reaction from other quarters. But when this formula, having met with some success, is extended to meet shortages of skilled workers, a privileged status is enjoyed by a category of workers who, because they are unemployed, are the only one able to enjoy a free course of vocational apprenticeship financed by the State and who receive an allowance to replace their salary during their training period.

The Institution responsible for accelerated training was influenced by these two factors and, being anxious to give greater efficiency to its courses, it began to interpret the original concept more and more loosely and to admit for training candidates for whom the name « unemployed » was purely nominal, if not a mere formality. A man who had left his job yesterday could to-day be admitted for training as « unemployed ». Thus selection was effected according to a new criterion, which made a distinction between those who « knew the ropes » and those who did not. This is certainly not the most rational criterion and social justice plays very little part in it.

It is nevertheless such an evolution which took place in the Netherlands and Belgium during the years following the war, until recognised unemployment and, where appropriate, receipt of unemployment benefit ceased to be the only criteria for admission¹.

1. The European Social Fund is also faced with some difficulty by reason of having concentrated its efforts in the field of vocational retraining round the idea of unemployment. The intentions of its promoters,

On the other hand, when the policy is to counteract chronic unemployment in depressed areas by training courses which pave the way, either for the introduction of new enterprises or the transfer of surplus manpower to other regions or countries, it does not have to face the same criticism as a national policy of rapid training for unemployed workers only.

Such courses were organised on a grand scale in Italy ; it is possible that over the next few years Great Britain may also develop a less ambitious programme for transferring unemployed workers from Scotland and North East England to the industrial areas of the Midlands and the South.

2. *Vocational rehabilitation of the disabled*

Vocational retraining or up-grading for the disabled has never met with the same objections as retraining for the unemployed only, since the distinguishing criteria are easier to define for the disabled than for the unemployed because public opinion accepts a « privilege » for handicapped people, who have more difficulty in competing with normal workers in the employment market. Moreover the number of trainees is limited because of the very physical and mental obstacles which lessen their chances of taking up many skilled jobs.

« Thus only a low percentage (less than 20 per cent in 1962) of the disabled admitted to I.R.U.'s (Industrial Rehabilitation Units) in Great Britain, is regarded at the end of the observation period as fit to undergo an accelerated training course. »

3. *Training of social categories which have priority*

We meet here the idea of a « privilege » : the State offers the possibility of becoming skilled in a trade to certain workers it considers to be creditors of the nation for services rendered.

In Great Britain, ex-soldiers who enlisted voluntarily may take courses at the G.T.C.'s as a reward both for their service with the colours and also because this long period of service has

from 1958 onwards, seemed nevertheless valid, in theory. By a system of equalisation payments, the member states of the Common Market were to be encouraged to adopt measures for vocational retraining to prevent or remedy unemployment, which might appear as industry became transformed by the creation of a vast market and the changing of the traditional customs barriers. They aimed at developing a system of A.V.T. in each of the member countries, the intervention of the Fund however being limited to workers who were actually or potentially unemployed or underemployed. But in countries which have an A.V.T. system which in practice is accessible to all workers, the distinction between a worker who obtains promotion and an « unemployed » worker admitted for rehabilitation may well become more and more subtle. Control would have to be intensified so as to check on a vague distinction between training that has to be re-imbursed and training that does not.

barred for many of them any possibility of becoming skilled in a « civilian » trade.

After 1945 former political prisoners or prisoners-of-war were also able, in France and Belgium to take accelerated training courses, on better terms than unprivileged trainees.

4. *The retraining of certain groups of workers as the corollary of a policy of regional economic redevelopment*

In this context, A.V.T. is one of a number of measures intended to encourage the creation of new enterprises, the « re-conversion » of those already existent to meet the new demands of the market and the transfer of workers from condemned industries to expanding sectors.

This intention has given rise to the centres built or planned in France in « unemployment zones » or areas of industrial under-development ; to the planned setting-up, in Great Britain, of new G.T.C.'s which will chiefly affect the depressed areas of the North, and North East ; and to the courses created in Belgium for the retraining of a certain number of miners, who were affected by the closing-down of mines.

Sometimes, official financial assistance for the redeployment of workers in industries that are new or undergoing conversion, or for initiation to new tasks, does not take the form of A.V.T. courses, especially when the jobs require less extensive training of manpower. Such is, in particular, the case for the funds due to be granted in France and in Belgium towards the general expenses of vocational training of personnel for enterprises which are being created, expanded, « converted », or decentralised in order to start new industry in less industrialised areas.

5. *A selective emigration policy*

Two kinds of countries have, for several decades, been appealing for immigrants :

- a) Those in which population growth is slower than industrial expansion. The need for new foreign labour is moreover usually greater than the need created only by the above unbalance, as the raising of the standard of living which occurs causes nationals of the country to give up a certain number of manual jobs. This happens mostly in the industrial countries of Western Europe.
- b) The countries with an insufficient population in comparison with their unexploited resources and potentialities, such as the countries of South America or the white Commonwealth.

These countries draw chiefly on the « reserve » of immigrants from countries of the Mediterranean coast in which industrial development was on the contrary substantially less rapid than population growth.

Until a recent date, the emigrants to industrialised countries were unskilled and ready to take labouring jobs in their country of destination. Italy, however, especially during the last ten years or so, has tried to give migrants, by an A.V.T. system, a minimum of vocational skills which has enabled them to occupy more specialised jobs and, when emigration was not permanent, to bring back in due course to their native country the benefit of the further training received by them in the country of destination.

In « new » countries a certain level of skill in a job was often demanded as a condition of entry : the vocational training of emigrants was often carried out as a result of bilateral agreements and with technical and financial help from international organizations such as the « Intergovernment Committee for European Migration » (I.C.E.M.).

Moreover, Great Britain had already, after the first World War, organised training of emigrant workers which was similar to A.V.T., not in order to export surplus population but as part of the regular supply of British subjects to the Commonwealth countries.

*

**

The objectives already mentioned which have, for different reasons, inspired the creation of A.V.T. centres in several European countries are characterised by their temporary, fragmentary nature, which is closely linked to exceptional circumstances or to the evolution of employment; even as regards the reclassification of the disabled, the success of the work which can be done in this domain depends on the economic situation, which makes employers more liberal or more restrictive when engaging disabled workers.

In such circumstances, the operation of an A.V.T. system was subject to a considerable amount of fluctuation ; its activity was increased or reduced as modifications took place in the conditions which had given rise to its creation.

Such was the case, after the second World War, of the British centres whose purpose was extended to redeploy demobilised and disabled soldiers and of Belgian centres which were a result of the need for re-absorbing unemployed workers.

This was also the case in a certain number of other countries (Germanic and Scandinavian countries especially) where A.V.T. centres were organised out of public funds as a means

of redeploying the unemployed ; for this reason no specialised institution was set up and courses were left to the initiative of organizations which had acquired some general experience in the field of vocational training.

A.V.T. on the other hand, takes on a permanent function, which is carried out by a specialised institution, after it has been given new objectives, which have come to light and have developed during the last twenty years (more particularly those analysed in paragraphs 6-8 below).

6. *A complementary system of vocational training and apprenticeship*

For various reasons, which will be analysed at B in the present chapter, vocational training or apprenticeship are not supplying adequate « replacements » for skilled labour, either in quality or quantity.

Therefore A.V.T. is given the task of remedying the deficiency by training an additional contingent of skilled workers. Nevertheless, it is not a question of making up a temporary deficit, but of satisfying needs which are considered likely to be permanent for an uncertain length of time, in these circumstances, A.V.T. will become an institution.

7. *Rapid training of adults*

Just at the teenager is offered the possibility of becoming qualified in a workshop or at school, so it is being considered more and more natural that the adult should be able to qualify if this could not be done earlier. A course of fulltime training, of limited duration, seems better adapted to adult needs than long, part-time training; a fortiori, it is preferable to the empiric system by which, in the workshop itself, certain knowledge and « knacks » which the old workers tried to keep secret were « stolen », the newcomer being considered as a prospective rival rather than a workmate. Moreover this mentality, which was kept alive by memories of the old days of unemployment, has not entirely disappeared.

8. *Promotion of adults*

This follows quite logically if we accept the previous principle. As soon as we consider that the possibility for an adult of becoming rapidly qualified in a trade is necessary and justifiable, we must admit that qualification may occur at different levels, according to the individual's background, that is, to the knowledge already acquired by candidates for promotion. In so far as technical needs justify it and it is proved possible to teach

techniques and knowledge, appropriate for instance to intermediate supervisory level, in accelerated courses, the body in charge of A.V.T. can add progressively to the training of unskilled workers, promotion courses for semi-skilled or skilled or any other category of workers towards higher grades.

In France, the progressive, continuous development of A.V.T. was chiefly directed towards these last three objectives, without however precluding the other factors previously analysed (from 1. to 5.).

In the Netherlands, a distinction is made among trainees, between those who are following training for the first time (« scholing ») those who, being already skilled, are learning a new trade (« omscholing »), and those who are re-learning a forgotten trade (« herscholing »). However, this rather theoretical distinction has no bearing on the method of tuition, which is the same for all, but does affect perhaps the length of their respective training courses.

9. *A transitional measure for countries in course of industrialisation*

Lastly, countries whose economy is chiefly based on agriculture or handicrafts, where modern industry must be created without recourse to the slow, progressive transitions the industrial countries went through, have neither the means, the experience nor the necessary senior personnel to establish a complete network of vocational and technical training, able to develop in step with industry. In such periods of transition, A.V.T. ensures that the technical potentialities of a generation of workers are not lost¹.

Using another formula, the I.L.O. as long ago as 1950 approved the multiple aims of A.V.T. by inviting the member states to create their own means of vocational training, adapted to the needs of adult workers².

B. EVOLUTION OF THE DEMAND FOR TRAINING AND OF THE METHODS OF VOCATIONAL TRAINING

1. *Increasing changes in production techniques*

Although the introduction of motive power in the countries of Western Europe caused a veritable technical revolution, especially in the first part of the 19th century, the machinery of production evolved only slowly and step by step throughout the

1. See Annex I: General features of vocational training in many underindustrialised countries.

2. Recommendation No. 88.

following century, fundamental techniques in most trades remaining unchanged.

The workers who, around 1825, were employed in the building industry, in smelting, weaving, mining, quarrying and many other sectors, could have plied the same trade a hundred years later without any great difficulty in adaptation. The tools of production had been improved and diversified as regards their mechanism without any modification of their fundamental characteristics.

When, in the mechanical sector, whose evolution was more marked, the technical schools elaborated the study programmes for mechanics, they were sure of giving their pupils a training which they could use all their lives, just as did the practical experience acquired by a journeyman in the «Tour de France»¹.

Thus during the first century of what history continues to call the industrial revolution, the fundamental techniques of most trades remained fundamentally unchanged. Less than 25 years ago one could still pertinently ask a working-class youth : « What trade will you choose ? » and be sure that his choice would set the pattern for all the rest of his life.

The « risk » involved in such a life was unemployment or illness or industrial accident and not the disappearance of his « trade ».

Things have changed today : a violent new technical revolution is taking place in most industrial sectors as a result of the introduction of electronics, automation, atomic energy, plastics, prefabrication of standard components and sections of buildings. The new work techniques which have brought on this new revolution are no longer a modern version of the old methods and therefore the worker finds it more and more difficult to put the techniques he learnt in his youth to a profitable use.

2. *The new permanent structure of the economic machine*

This is a direct consequence of the technical revolution. It is speeded up by political decisions, in particular those which encourage the creation of vaster markets. Other technical achievements create new needs by offering the means to satisfy them.

A multitude of factors, by their respective action and interaction, ultimately transform the industrial structure of states in one or more decades. While some enterprises are doomed to disappear, factories are transformed and enlarged, others ap-

1. In the old days, trade apprentices, before setting up as journeymen had to pass a certain time in several different towns in France. « L'Association Ouvrière des Compagnons du Devoir et du Tour de France » is in effect carrying on the old traditions of « compagnonnage » by bringing them up to date.

pear in areas zoned for industry which were green pastures yesterday.

Moreover, nothing proves that the technical revolution is complete today. On the contrary, everything leads us to expect fresh upheavals and further acceleration.

3. *The workers' desire for stability and for advancement in their trade*

In their heart of hearts, the workers are not well prepared to face this revolution. The workers of today retain their memories and fears of economic crises and the misery they bring. They aspire to stability and security in a world that is technically unstable. They demand guarantees and assurances against threats which appear in a new form : no longer in that of idle machinery but in that of an unknown contrivance which takes the place of the old familiar tools. At best they fear occupational « demotion » or failure to achieve the promotion for which new techniques provide opportunities.

4. *Social evolution tends to satisfy these aspirations and allay these fears*

Thanks to an economy which has been expanding for many years, the relationship between opposing social forces and the evolution of ideas tended to satisfy the aspiration of workers towards stability and betterment.

In the course of the general evolution of the industrialised countries of Western Europe, the right to work has been indirectly sanctioned by a more and more generalised and compulsory use of unemployment insurance.

The retention of a position acquired in society and at work is guaranteed more and more as the contrary becomes considered as the result of arbitrary action by the authorities : compensation paid to men rendered workless by the closing-down of enterprises and, for dismissed miners, payment for one year of their former salary, appear to be the first step in this direction ; we may also include, as an example of this tendency, the restrictions imposed on dismissals in Italy.

The right to social betterment, accessible to all those worthy of it, also appears to be a recent achievement, although not always borne out in actual facts.

Finally, legislation tends more and more to facilitate the reintegration of workers who are obliged to change their occupation because of personal circumstances (illness, accident, removal to another place of residence).

*
**

To what degree are the traditional systems of vocational training still suited to these new requirements ?

1. Vocational training, which was conceived for the needs of another industrial period, has great difficulty in keeping up with technical evolution. Its basic programmes for traditional trades, even where broad and polyvalent, no longer ensure that the student once trained will be able, in later working life, to adapt himself to technical upheavels.

2. Evening or week-end continuation courses, although followed by many, were originally meant as training for promotion and appear more and more, when they last several years, to be reserved for an « elite » and are less and less compatible with the social conditions of life.

3. Moreover technical schools, at the lower level, although intended in theory for the training of skilled workers, are less and less « terminal » schools. Workers who pass their C.A.P. (certificat d'aptitude professionnelle) in France or their A3 (lower full-time vocational training courses) in Belgium frequently go on to the higher technical courses or widen their gamut of available skills by enrolling for specialist courses within the group of trades related to their basic training.

Thus a form of training originally devised essentially for producing skilled workers, has become a kind of step towards accession to supervisory posts in workshops or offices. Paradoxically enough, skilled workers tend to be recruited from those who give up lower level training after one or two years.

4. Industry, alongside the schools, used traditionally to assume the task of technical initiation especially of young people by using the formula, approved by law, of articles of apprenticeship. This training role, which industry continues to assume on a large scale, according to established tradition, especially in Germanic and Anglo-Saxon countries, is today being re-examined under the influence of numerous factors :

- a) Firms are under ever increasing pressure from intensified competition which drives them to make greater efforts in the field of productivity. They consider that a properly thought out and organised apprenticeship is not very profitable in the short run. Moreover, since a worker can, today, change his employer much more easily than in the not-too-distant past, the firm hesitates to assume training expenses the benefit of which may be reaped by a rival firm. This consideration, moreover, is prompting many employers to ask the authorities to institute an apprenticeship tax as a means of equalising and spreading the cost.

- b) The small or medium-sized firm considers that it has neither the necessary technical staff nor the equipment to carry out training duties likely to disturb its organisation, geared to production; it tends more and more to entrust this responsibility to the authorities.
- c) Workers' organisations, disturbed by undeniable abuses arising from a system of apprenticeship which was empirically organised and ineffectively supervised, tend to regulate it severely and even to do away with it.
- d) The psychological and social evolution of the young worker who strives, from early youth, to obtain a full-rate wage-package which will give him greater independence from his family, accentuates, and will continue to accentuate the tendency to avoid long « on-the-job » forms of training.

5. As regards adult workers, firms are becoming more and more demanding before engaging them, in particular for posts which require a certain level of skill. Since increase in profit is by no means in direct proportion to increase in the volume of production, many firms prefer a « Malthusian » policy of limiting production rather than the assumption of the expense of training adult workers, for whom most collective agreements guarantee a minimum wage-rate.

6. Finally, as far as training in both industry and schools is concerned, the rising standard of living in all industrialised countries caused apprenticeship in some trades, particularly in those where working conditions are the most arduous, to be abandoned. The result is that in vocational training courses, some subjects are ill attended and others crowded. But such choices of career made under the influence of the social climate, will later produce disequilibria in certain sectors of the employment market.

C. THE NECESSITY OF AN A.V.T. TRAINING SYSTEM AS A POLICY WEAPON FOR RESTORING BALANCE TO THE EMPLOYMENT MARKET

On the one hand, technical schools tend more and more to provide training of supervisory grades, of a higher job level than the skilled worker ; the distribution of students among the various matters taught bears very little relationship to the jobs vacant in the economy as a whole ; finally those who will obtain skilled jobs on leaving school are less and less sure of being able to adapt themselves to technological change.

On the other hand, traditional training in industry is un-

dergoing re-appraisal or is declining both for young people and adults.

While economic expansion in the countries of the Common Market is causing a generalised labour shortage, the imperfections of the two traditional forms of vocational training at skilled worker level are all the more serious since they may not only hinder expansion but also lower the quality of the production. While in the Federal Republic of Germany, for instance, 600,000 skilled workers a year reach the age of retirement, the traditional apprenticeship system, which in that country constitutes the essential and almost exclusive source of replacements, trains only 400,000. The deficit in Germany and elsewhere may well be accentuated in the next few years by the factors we have just analysed. The immigration of foreign labour, principally of Mediterranean origin, which partially makes up the deficit in unskilled labour, does not provide a solution as regards skilled workers.

*
**

In relation to needs born of current trends, A.V.T. is therefore developing more and more as the instrument of a manpower policy designed to make up the quantitative shortcomings of the vocational training of the young and to correct disequilibria in the employment market, caused by fluctuations in the economic situation or by technical transformations.

Nevertheless, before deciding on the need for a new formula for correcting imbalance in the employment market, we may ask ourselves whether technical developments do not lead to a decrease in the number of skilled workers needed, with a corresponding increase in higher-grade technicians and in specialists with more limited knowledge. Does not a « trade » appear today, (and more so to morrow) as a survival from the days of the old craftsmen, foredoomed by mechanization of their tasks ?

To this argument, which appears at first sight in line with technological changes, the following arguments must be opposed :

1. Even if it could be proved that the number of posts for skilled workers were decreasing, this decrease is less than the corresponding diminution of skilled candidates since the scarcity is manifest and constant in most branches of work ;

2. The jobs which require real skill have been transformed, for example from actual accomplishment of production processes to the control of automatic machines, maintenance and repair ;

3. « Trades », even of the craft type, continue to demand a considerable amount of skilled labour in some of the main sectors, such as Building, Mechanical Engineering and Clothing ;

4. The shortage of manpower has now spread to levels immediately below or above that of skilled workers, particularly among middle technical grades, draughtsmen and semi-skilled assistants (« mates ») ;

5. The forecasts made for the next few years, either by economic planning services or by trade associations, confirm the likelihood of an increase rather than a decrease in the numbers needed at various levels.

D. PURPOSE AND SCOPE OF THE PRESENT STUDY

The subject of the present study will be the range of all the types of A.V.T. training, that is, in practice, those which have developed in each of the four countries, and, under the Ministry of Labour, are directly managed by a public, semi-public or private organization, under the supervision of and with financial help from the authorities. Training carried out in schools or by firms will only be mentioned or analysed in so far as they follow the criteria which distinguish the immense majority of the types of A.V.T. training, that is training ;

1. Based on the short-term needs of the employment market.
2. Shorter in duration than apprenticeship or traditional vocational training.
3. Intended for adult workers.
4. Essentially with a view to actual work in a trade.
5. Intended to give the trainee a new skill.
6. Based on original programmes and a methodology peculiar to A.V.T.

The notion of a skill mentioned above in point 5 may lead to confusion by the fact that it does not have a clear or standard definition, or a comparable basis in each of the countries and for each trade.

Let us mention provisionally and subject to more precise details to be given later¹, that tuition at the level of the skilled worker² must teach trainees enough skill at their work to enable them to execute most of the complex operations of a trade, at first perhaps as an assistant, under the supervision of a charge hand, and a wide enough range of knowledge to allow the best candidates to obtain further promotion.

1. See, for example, Chapter VI, which analyses the standard and variety of skills which can be acquired by A.V.T. tuition courses.
2. Which has constituted until now the greater part of A.V.T. training.

From the foregoing, it will be realised that this study will deal mainly with accelerated adult training carried out by A.N.I.F.R.M.O. in France, by the G.T.C.'s in Great Britain, in Belgium by the National Employment Office (O.N.Em.) and in the Netherlands in the Vocational Adult Training Centres of the Ministry of Labour.

But a study of the present needs of an economy which must have skilled workers available at short notice, to meet a fluctuating need, must not be limited to an analysis of the functioning of the public and semi-public institutions whose purpose is to meet these demands. The work of A.V.T. can be done outside the specialised Institutions mentioned. Conversely, the field of these organisations can include training activities which are difficult to class under the title A.V.T. Therefore we deem it wise, so as to define once more the field of action of this study, to enumerate a certain number of types of vocational training or rehabilitation, run by the managing bodies already mentioned or by other institutions to which we shall allude now and again, and which have points in common with A.V.T., but detailed analysis of whose activities is not within the scope of the present document and would make it unduly long. They include :

1. accelerated training courses of short duration, organised by numerous firms either « on the job », or in separate workshops, whose aim is to instruct and adapt the worker for a job in which recurring processes, of a limited and specialised kind, do not demand a thorough technical grounding. Such work is not known professionally as a « trade » ;
2. further training courses in the form of continuation courses or seminars organized by firms, especially for their supervisory grades, during or outside working hours. Generally these courses are intended to provide replacements and promotion for supervisory grades or information relative to new techniques ;
3. evening or week-end tuition organized by technical education services and whose aim is to raise the technical or overall standard of workers or supervisors without being directly linked with fluctuations in the employment market ;
4. schemes for the rehabilitation of the handicapped, the crippled, the disabled or the victims of accidents involving medical, legal or vocational measures among which an A.V.T. course forms part of the reintegration of the disabled into working life.

*

**

But vocational training at all levels constitutes a whole which must be governed by a co-ordinated policy ; nor can it be separated from general education which sustains and completes it.

An explanation of the solutions adopted by one country or another in the sphere of A.V.T. can only be understood in relation to the past and future development of the other prevailing forms in which vocational skills can be acquired.

We shall therefore frequently allude to vocational training systems for both young and adult workers, in schools and in firms, and whatever may be their relationship to A.V.T. (collaboration, indifference or rivalry).

Let us finally remind our readers that a description of four national systems of A.V.T., side by side, would be of little interest. Geographical comparison would appear more profitable when combined with an analysis of each of the main problems met with in organising A.V.T. : definition of aims, evolution of conceptions, administrative and technical management, preparation of syllabuses, teaching methods, selection of trainees, training of instructors, future prospects, obstacles which may occur, etc. etc.

Chapter III

A.V.T. SYLLABUSES AND METHODS

Among the distinctive criteria inherent in A.V.T., we have mentioned the particular nature of its syllabuses and methods. The need to work out an original type of training, different from the traditional systems, is no longer questioned today, even in countries which still make available A.V.T. training along empirical lines.

The International Labour Conference in 1962 recognised this need when it devoted the main part of its Recommendation on Rapid Training to the enumeration of principles for A.V.T. training and methods.

I. THE BACKGROUND OF RECRUITMENT

It is above all the demands, aptitude, and psychological characteristics of adult¹ candidates for A.V.T. which condition the methodology of such training. If we analyse these methods, as opposed to those used for young people, we can formulate the rules to which a training system must adhere if it claims to be efficient.

1. *The objectives*

At first sight, the objectives of A.V.T. training are identical to those of a school programme in a lower vocational cycle or formal apprenticeship, since they too lead to a vocational qualification².

2. *The social position of the adult*

While the youth, at least when he completes vocational training before 21 years of age, remains part of the family unit,

1. Though starting with the principle that A.V.T. must be reserved for adults only, we shall nevertheless analyse in Chapter IV, paragraph III, (on the conditions for admission) the tendency to extend A.V.T. to young people.

2. This idea is put into practice in France, where A.V.T. has been assigned the task of conferring OP.I level training (that is, skilled worker, first grade).

economically speaking, the adult must provide for his own needs and those of his family.

Collective agreements almost always guarantee him a minimum salary which is higher than that granted to young workers, even with the same qualifications.

On the other hand, firms demand from adults not only work of good quality, but also a minimum level of productivity from the very beginning.

3. *Sense of responsibility*

The adult takes vocational training very seriously since he usually considers it as his « last chance » to obtain advancement in his work.

4. *Aptitude*

The youth receives vocational tuition as part of or immediately after his school training. On the other hand, the mental discipline acquired at school has for the most part disappeared a few years later, while manual dexterity has developed with the years, even in unskilled work.

5. *The psychological make-up*

While a youth will accept intellectual exercises and reasoning which are unconnected with immediate reality, because he can see it as a game, an adult insists on usefulness and direct application of any theoretical notions which training may try to instill in him.

6. *Time*

Life makes many demands on the adult's time and he can therefore only spend a limited period undergoing training. When it comes to full-time training, which is the case for A.V.T., the organization which finances the courses must give the trainee an allowance to live on and consequently tries to reduce to an absolute minimum the learning period.

II. GENERAL METHODOLOGICAL BASIS

The methodology applied in Accelerated Vocational Training is not only a result of the factors already mentioned, which constitute the data of the particular problem of A.V.T. It has been enriched by drawing on contemporary teaching systems, which it was better prepared to accept and adopt than the traditional system, largely impregnated with the ideas prevalent at

the period of its greatest development, that is, during the first quarter of the 20th century. In France, the Institut National de Formation Professionnelle (Institute of the rue Dareau) undoubtedly claims to have inherited the Cartesian « Discourse on Method » but the application of the principles of Descartes in the drawing up of A.V.T. programmes and methods was more directly influenced by modern techniques of work analysis, by the American experiment of Training Within Industry (T.W.I.) and above all by the teaching of Carrard and Decroly, although neither was a specialist in vocational training of adults and they only approached teaching via psychotechnics and medicine¹.

A certain number of methodological principles have been established and appear to be generally accepted, although applied to a varying degree in different countries. These principles concern the contents, and method of drawing up, of syllabuses as much as the actual mode of teaching².

III. THE SCOPE OF A.V.T. SYLLABUSES AND THEIR PREPARATION

a) *The content of syllabuses*

In countries where the lower study-cycle in technical schools is the most common formula for initiating young people into trade techniques (C.A.P. in France, School A3 and A4 in Belgium, Technical School of lower grade in the Netherlands) a very strong tendency can be seen to broaden general technical training at the expense of specialisation. This emphasis is itself a consequence of the speed of technical changes which demand an increased capacity for comprehension and faculty of adaptation on the part of skilled producers³.

Can A.V.T. follow such a trend, in view of the limited period of time during which the tuition is given and the necessity of giving the trainee, after the course, the possibility of carrying out the essential operations of a trade with sufficient skill and output to justify the scale of his salary ?

It would seem that the answer must be « No » and that A.V.T. must be content with awakening in the trainee, when

1. See for example Carrard's « La Jeunesse de Demain » and « La Psychologie de l'Homme au Travail ».

2. Their systematization has taken place chiefly in France's A.V.T. courses. It appears superfluous to reproduce them there and we refer our readers to the following publications : « Accelerated Vocational Training », O.E.C.D. 1960, pp. 243-248 ; « Notre Formation », Special Edition No. 31, A.N.I.F.R.M.O. ; Part V of the present chapter also contains a critical analysis of the principles which will be described in III and IV.

3. In this context, a brochure published by Fabrimetal (Federation of Belgian firms in the Metalworking Industries) : « Les Jeunes dont l'Industrie a besoin », makes interesting reading. It puts forward the idea of a broader basic training in technical theory at all levels of technical study.

explanations are given during the syllabus, a desire to enlarge and enrich his knowledge at a later date.

A.V.T., which is hardly affected at all by the principles of traditional teaching is liable to go to the other extreme, that of specialisation based on requirements which are too narrow. Indeed, its close connection with the employment services causes it to undergo pressure from local firms¹ for whom the productivity of the trainee in relation to the jobs they can provide is a very important factor. Such specialization, which serves the short-term interests of a few firms, goes against the broader interests of the trade as a whole and is against the interests of the trainee himself since it hinders his movements geographically and in his work and also his chances of future promotion².

Finally, the institution in charge of A.V.T. may be obliged to « readapt » the former trainee who has become unemployed or returned to unskilled work, as a result of economic or technical fluctuations to which the worker, specialised in one job, cannot adapt himself.

Thus a considerable increase in A.V.T. may well hide a deficiency in quality, and increased expense may be entailed owing to the larger number of courses given, but without increasing the actual efficacy of the whole.

b) Preparing a national syllabus for each trade

When A.V.T. is first being developed and especially when a central service has not yet been able to acquire sufficient experience in drawing up syllabuses for the teaching of new trades, it is inevitable that the content of the subjects taught should be influenced, as is still the case in Belgium, by local considerations. A certain number of conditions must be fulfilled before national syllabuses for each trade can be drawn up, the contents of which will correspond to the goals of A.V.T. and can withstand criticism from the experts.

1. A central national service must contain specialists trained to draw up syllabuses and apply vocational methods of adult teaching (this is the case in France, the Netherlands and the United Kingdom).

2. The completed syllabuses must be submitted to special national committees, whose members must include skilled technicians chosen from among the best qualified in the trade in question.

1. That is, those established in the region where the training takes place.

2. This often results from the short-sighted view that since the trainee has been recruited in this region, he will be called on to work in some industry near his place of residence.

This is common practice in France, and the United Kingdom. The approval of delegates who really « represent » the employers of a given sector or enjoy their confidence eliminates most criticism in a domain in which differences of opinion are very frequent among experts.

Such consultations only take place occasionally in Belgium and the Netherlands.

3. The interest of Trade Unions must be awakened and they must be encouraged to take part in the approval of the general pattern of syllabuses. It should be emphasised, in particular, that the content of the training influences the working future of the trainees. Until now, Trade Unions have been mainly interested in A.V.T. from the viewpoint of workers' demands (emoluments of instructors, selection of trainees, allowances paid to the latter, working conditions during and after training etc.). The collaboration of workers' representatives in drawing up and approving syllabuses also constitutes a protection against the tendency towards specialisation. Except in France and in the United Kingdom, where the main workers' and management organisations have begun to participate more and more in the discussion of syllabuses, there has only been occasional collaboration by Trade Unions in this field.

4. In Great Britain, as in the Netherlands and France, it is only possible to change the standard national syllabus if the approval of the central organization has first been obtained. Provided the main essentials of the programme are preserved, it would be possible for instance, during the last month of training, to concentrate on one or other kind of manufacture predominant in those industries which it may be presumed will be chosen by the majority of the trainees. Adaptation to methods of work or to the equipment most commonly used in the region may also assist trainees to obtain employment.

c) The method of drawing up syllabuses

Most of the manuals used in the G.T.C.'s of Great Britain are largely concerned with job technology, besides indications about the work to be accomplished.

In Belgium, a standardised technique has not yet been adopted for drawing up « Syllabuses » for instructors, and consequently the texts appear (according to the trade) in a concise, or on the contrary, an extremely detailed form. Only a limited number of manuals are based on detailed, original work analyses.

In France, drawing up a syllabus is based on an occupational monograph. The general content of the programme is then submitted for the approval of a national committee of experts. It

is then the job of the teachers of the Institut National de Formation Professionnelle (who may be assisted by a specialist in the occupation concerned) to draw up the syllabus, in several phases. The expert will substitute a pedagogical list of exercises for the chronological order in which the various operations of a trade are performed (which he will use to determine the content of the subject to be taught with an analysis of the difficulties). These exercises will be arranged in increasing order of difficulty, leading in one or more steps to a final synthesis which will include all the operations and difficulties found in the occupation¹.

Like France, the Netherlands have standardised the drawing up of syllabuses, according to a technique which is somewhat different : the content of the programmes is prepared by two experts trained in work analysis, one of whom is specialised in the Building Trades and the other in Metalwork.

If there is a request for a new course, the central organisation asks the analyst to set up an enquiry which may often last several months. His conclusions will be given in a comprehensive document which will describe in detail the tasks demanded of the qualified worker, the conditions in which he will ply his trade, the equipment, tools and materials used etc. etc.

This study will serve as a basis for the drawing-up of the exercises of the « course », the main part of the work being accomplished once more by the analyst together with the « Central Courses Bureau » which will, under his authority, prepare the drawings and exercise sheets.

During this last stage, in which the documents are drawn up, the analyst will have recourse to an expert specialising in the occupation to be taught ; the assistance of the latter, however, will only be of a technical, and not a pedagogical nature. Any document completed will be considered as provisional until it has been tried out in one or several of the teaching sections.

d) *The length of A.V.T. courses*

In Great Britain and France the length of almost every course is fixed at six months, except for some more advanced courses (for technicians) the length of which varies from nine to twelve months. In Belgium, a distinction is made according to the difficulty of the trade and training can vary from four months (gas and electric welders, seamstresses in the clothing trade) to ten months (toolmakers). Most courses, however, last from five months (main structural jobs in the building indus-

1. The detailed way in which a syllabus is established is described in the publication « Accelerated Vocational Training », O.E.C.D. 1960, pages 59-64.

try) to seven or eight months (finishing trades in the building industry, sheet-metal and plate working, machine tools). The range of duration is much greater in the Netherlands and the period of training varies from four months for the welder (gas only or electric only) to almost two years for the toolmaker (precision tools). The length of the courses in given trades is appreciably greater than elsewhere since it is, for example, eight months for a mason, eleven months for a shuttering man, 14-15 months for a maintenance fitter, eleven months for a turner, seven months for a sheet-metal worker.

These are *average* periods for each profession and not the actual period spent by each trainee, the training being organized individually and not collectively¹.

e) *Syllabus breakdown*

Though applied differently according to country, an A.V.T. syllabus is generally divided into four different periods.

1. Preparatory,
2. Training itself,
3. Combination exercises,
4. Application (or practical work).

1. *Preparatory* training is based on the principle that trainees must only be faced with one difficulty at a time and that, in a progressive syllabus, they must only be given tasks compatible with the knowledge or skill they have already acquired.

Now, the most simple operations, which should normally in order of teaching be the first exercises in a syllabus, will in reality entail a large number of difficulties which can only be overcome at one and the same time by the beginner to the detriment of the quality of his work. The correct laying of several courses of bricks on mortar which at first sight constitutes the easiest of a bricklayer's tasks, entails in reality a multitude of difficulties at the same time, such as preparation of the mortar, correct positioning of the body, the movements involved in picking up mortar and bricks, the handling of the trowel, laying the bricks level and plumb, which calls for use of a spirit level and plumb-line, etc.

This happens in every trade and it is not enough to say that one must go from the simplest to the most complex task in order to carry out the simplest job of the trade. That is why the trainee, before tackling, as an exercise, the simplest job in the trade, (which will probably constitute the first exercise of

1. See paragraph IV, c, of the present chapter. Although the method of individual tuition is also followed in a certain number of British and Belgian centres, the period of training for each trainee is determined more uniformly.

the training period) must have mastered, at an earlier stage, the art of handling the first tools and materials to be used.

The main purpose of the preparatory period is also to teach dexterity and perfect handling of the basic tools, for it would appear difficult to correct at a later stage bad habits acquired by the trainee who has been faced with too complex a task at the outset¹. When the tool is difficult to handle (for instance, the file or plane) various apparatus or guides may enable the beginner to acquire the knack gradually. In the Netherlands, the first manipulation of basic tools, placed on special apparatus, takes place in rhythmic form².

The same applies to dexterity exercises in the clothing trade (France and Belgium).

When it is the material³ which is difficult to handle it can be replaced, in the preparatory period, by a substitute material which is easier to work, while enabling the same tools to be used. The most striking examples are the substitution of paper for cloth in preliminary training in the clothing trade and the use of lead instead of red-hot iron in preliminary training in forging.

However useful it may be, preliminary training nevertheless has the disadvantage of being somewhat artificial, unrelated to the realities of work, and shocks the adult trainee who expects to come to grips as soon as possible with work as it really exists on the job. There is already a growing tendency in France to shorten the period of preliminary training (formerly of three or four weeks' average duration) and to make it alternate with the early exercises of the actual training course as soon as the movements involved in the work have become familiar. It is even conceivable that the art of handling the most difficult tools could continue to be perfected during the first training exercises.

The timetable of the preparatory period is arranged so as to

1. In driving, the learner discovers that, most of the time, if he observes the Highway Code this will detract from the precision of his movements in handling the controls!

2. Artevo (Arbeidstechnische Vóóroefeningen).

3. When a comparative study is made between different countries, a difficulty of terminology arises, even among those who use the same language.

Thus materials (« matériau ») are called « working material » (*matière d'œuvre*) in France and sometimes « raw material » (*matière première*) in Belgium. The terms equipment, machine, implements, tools do not always have the same meaning. What Belgians call a syllabus (« programme ») is known in France as a « progression » while there the word « programme » includes the additional documents of a progression. Another example, « roughstone masonry » (*maçonnerie au moellon*) is known in France as « limousinerie ». Although the risk of confusion could be increased still more by translation into another language, we do not think it necessary to specify each time the exact implications of the terms used which a man of the trade and even an unqualified reader will easily understand.

maintain interest and avoid fatigue, by alternation of a very considerable variety of exercises, during the same day. Sessions of rhythmic exercises, in particular for learning how to handle certain tools correctly, cannot last more than a quarter of an hour and must be frequently repeated during the first few weeks.

The Dutch conception of basic courses (*Grondcursus*) which must be followed by all the trainees in the same subject (either in building or in metalworking) combines the idea of the preparatory period with that of the guidance of trainees before their final choice of a trade.

On the other hand the purpose of the Belgian « observation and selection sections » is not to give training preparatory to learning a trade. Their programme, which lasts about eight or ten weeks, during which the trainees are initiated into the basic operations of about ten typical trades, combines prolonged observation, after which trainees are recommended to take or not to take an A.V.T. course, with the rehabilitation of disabled workers, for whom these special sections are exclusively organized¹. Nevertheless these sections which are of recent origin and have not been greatly developed so far, cannot yet hope to compare with the « Industrial Rehabilitation Units » which operate alongside official A.V.T. centres in Great Britain.

2. The *training* proper consists essentially of a range of exercises in the trade, in increasing order of difficulty. It constitutes the main part of the programme.

3. The *combination exercises (synthesis)* also prepare trainees for final examinations and must be carried out, like the training exercises themselves, in conditions as similar as possible to those of the works or factory.

This is why, although during the preparatory period and the first training exercises the time taken is less important than the quality of movements and operations, the last part of training and the combination exercises are concerned with the idea of output so as to obtain, by the end of the training, productivity equal in quantity to 70-75 per cent of that of an experienced worker.

4. The *application exercises* during the fourth phase of the programme are to facilitate the transition between what is still theoretical and the actual work which will be entrusted to ex-trainees in the firm where they will be employed. They will arouse the interest of the trainee who has the impression of achieving something durable and not a practice job which will be demolished or thrown away. In Building, they will awaken the team spirit and will allow a better appreciation of the mean-

1. Cf. V. Martin. « Les Centres d'Observation et de Sélection », *Revue du Travail*, Brussels, October 1963.

ing of output; they also economise on raw materials which are used once and for all during the exercises (especially in joinery and ceiling-work).

These application exercises, however, only have a positive advantage if a certain number of rules are observed :

- a) They must take their place in the natural progression of the syllabus. As they are often inspired by financial considerations which have nothing to do with training, they can upset a syllabus which has been planned with minute care, thus interfering with the systematic training of students. This condition is often more difficult to fulfil than may appear, especially in the methodology of individual tuition.
- b) Their introduction must take place at the right time and replace the exercises corresponding to the same work. This condition is also difficult to fulfil both for Building work (where the order of procedure is imposed by technical and meteorological factors) and in orders from the mechanical engineering or clothing industries.
- c) Except in periods of over-employment, they arouse, when undertaken on a fairly extensive scale, protests from the private sector, which talks of « unfair competition » especially as the cost of labour, for example on subcontracted work, is sometimes difficult to establish with sufficient precision.

All these difficulties have limited quite considerably the development of the practical work carried out by A.V.T. sections during the last stage of training. The Netherlands' centres do practically none ; in France it has been limited to the fitting-out of the premises of the A.N.I.F.R.M.O. itself; the same applies to Great Britain which does, however, accept orders from private industry, although mostly for the repetitive type of work of the « Industrial Rehabilitation Units ». It is in Belgium that this practical work is carried out the most, especially in the Building centres, but only for buildings of limited size, for local official bodies. It has usually proved possible to obtain approval for work of such limited scope from the local federations of the industrial sector concerned.

IV. SETTING OUT THE EXERCISES OF A SYLLABUS AND METHODOLOGY OF TUITION

a) *Documents required for a syllabus*

The contents of these are usually influenced by the principles and methods which govern the process of training.

They also depend on the system adopted for the admission

of trainees (group intake or staggering) which entails individual or group teaching¹.

In general a syllabus includes :

1. *The instructor's manual*

In A.V.T. training, it is drawn up in preference to, and in any case before, the « pupil's manual » which is rather reminiscent of scholastic ideas.

The document is short (in France, where « progression » is known as an « information sheet ») or long (in Belgium where the document is known as a « syllabus ») according to whether there is systematic training for instructors, completing the document². To make up for the absence of teacher-training for instructors, the « syllabus » includes detailed instructions which mention not only the general stages at which the work should be carried out and the essential points, but also specifies the alternation and introduction, in the course of the exercise and at the right moment, of additional notions of technology, arithmetic and drawing³.

In the Netherlands, the « instructor's manual » is the same as the trainee's work sheet.

2. *The trainee's work sheet*

In Mechanics chiefly, this contains a drawing of the piece of work to be accomplished, set out in the same form as for factory work, but usually, at the beginning of training, accompanied by an indication of the successive stages of execution.

These work sheets are very detailed in the Netherlands. Because of individual teaching and the staggered intake system, they constitute real study notes previous to the work itself, which the trainee tries to understand in the lecture-room. This study includes new technological notions to be absorbed during the exercise, some calculations to be done by the trainee and also the general procedure of the various stages of the work with the important points emphasised.

3. *Technical notes*

These are printed notes, which are distributed to the trainees, usually after the revision exercises (France).

They do not constitute a technological manual, but a summary of the theoretical teaching given with the exercises, for example during one week. They are a guide for the trainee and should be used when he meets difficulties later in his trade.

-
1. See Point c of the present paragraph.
 2. See Chapter IV, Paragraph II.
 3. See Point b of the present paragraph.

In adult education there is no point in « dictating » notes in the lecture-room, although this is often allowed.

4. *Marking*

In Great Britain and Belgium, each exercise is marked as a whole and this is completed by comments under a « remarks » column. In France, the marking is analytic ; each stage of the work (for example, tracing, cutting, shaping) is given a weighted coefficient based on the importance of each part of the work. The marking also allows for factors affecting the quality of the whole (adherence to measurements and tolerances, finish and presentation of the work) and for the time taken (at least, from the 2nd or 3rd month of the course onwards). In the Netherlands, the marking, which is also analytic, is put on the work sheet itself on completion of the exercises ; the marking is moreover linked with a bonus system which in other countries would be a frequent source of dispute.

b) *The pedagogical principles of the vocational training of adults*

Observance of a certain number of pedagogical rules is considered, especially in France where systematization of training has gone furthest, as an essential and indispensable element of efficient accelerated training.

The attitude adopted by each country towards these principles affects the way in which the exercises of a programme are presented and the training process itself.

These rules can be defined as follows :

1. In the accelerated training of adults, *85-90 per cent of total training time must be given up to practice in the trade*, that is the manual execution of the exercises and work of the trade. The Netherlands vary this rule : it may be taken that $\frac{2}{3}$ and $\frac{1}{3}$ of the total time is the average amount spent by trainees in various trades on practical work and on research in the lecture-room, respectively.

2. *The training must start from the concrete and go towards the abstract*. A student must first carry out a task before discovering the rules which govern it and face a difficulty before finding out the explanation which will allow this to be overcome.

This rule, which is neither stated nor applied in Great Britain or the Netherlands, is by no means in contradiction with the necessity of supplying, during a preliminary demonstration by the instructor, the instructions required for the subsequent execution of the job by the trainees.

3. The *concentration* of all the training around one point of interest — the « job » or piece of work to be carried out — implies that the theoretical notions are complementary to the practical work and closely linked to it. In A.V.T. — unlike vocational training — there are no separate courses on technology, arithmetic, geometry, drawing¹, security and hygiene. These different subjects are progressively introduced as complementary to the practical work, taught together with it, and, unlike in school teaching, it is these notions which, as far as possible, constitute a kind of application of the exercise itself. In other words, in A.V.T.-training, school-type « problems » are not solved, but lengths, surfaces, volumes or weights of objects or jobs previously carried out are calculated.

There is no question of the usefulness of this « integrated » method although its application varies considerably in each of the four countries.

4. All the training is entrusted to *one instructor*, who teaches practical work, but must also be capable of teaching the complementary theory of each exercise. Holding the view that a man with practical experience in the trade is not usually equipped for, or capable of, teaching theory, Great Britain and the Netherlands divide the items in the syllabus between different instructors.

5. *The number of trainees per instructor must be limited* to a group of 8-12, according to trade. This limitation should enable the instructor to help each trainee in carrying out his task and to check the various stages.

Originally considered as a « golden rule », especially for the first stage of the training (preliminary) this ratio was subsequently modified by all countries, chiefly for financial reasons.

6. *The active participation of trainees* is required to seek and discover theoretical notions, as also the stages of execution of a piece of work. This investigation must be effected by means of a discussion group².

1. In France however drawing is taught in separate courses and is not included in the overall syllabus.

2. In his book « Apprendre aux Jeunes à Penser leur Travail » (Comité National Belge de l'Organisation Scientifique, Brussels 1957), R. Thirion gives an example of the application of this principle, in the training of young people in a weaving workshop. This is much more than the ordinary participation of students, in traditional methods. They were asked, for example, during the preparation of a job :

- a) To break it down into elementary stages by analysis.
- b) To discover the best method of work.
- c) To determine for themselves the order of each operation.
- d) To look for possible improvements in the organisation of the job.

7. Finally, and as a corollary to the last principle, the group must be encouraged in the discussion not only to *discover «how»* but also «*why*» the operations took place.

The application of the principles given in Points 6 and 7 is obviously very variable, according to whether group or individual teaching is chosen.

c) *Group or individual teaching. The corollary to group or staggered intake*

A.V.T. training in France is given to trainees of one section in a group ; the admission of all the trainees takes place at the same date and training ends at the same date for all, after a course which usually lasts six months.

In the Dutch system, on the contrary, each candidate is admitted when he is free, whenever this occurs ; the trainee carries out each exercise of the programme individually and follows his training over a period which varies according to his capacity¹.

In Great Britain and Belgium, the two systems are applied at the same time (group and individual) according to the trades taught or according to regions.

In each of the four countries, among those who take an interest in A.V.T., there are supporters and adversaries of each system ; the choice of one or the other has nevertheless been made in each country, not so much according to pedagogical principles consciously adopted and applied, but in the light of problems of organisation which affect the intake and departure of trainees.

The advantages and drawbacks of each system may be stated as follows :

1. *From the point of view of the admission of trainees*

In an A.V.T. system which is based on the redeployment of unemployed workers, individual intake is necessary and consequently a system of individual teaching must be adopted. Without this, an unemployed worker may have to wait several months before admission to the centre, except if he agrees to move to a far-off region for the duration of the course (the system practised in France).

There is no point in having a staggered intake when unemployment is collective and simultaneous for a considerable number of workers (closing-down of factories or seasonal bad weather which have influenced, particularly in Belgium, the

1. The lengths of time mentioned in Paragraph III, d, of the present Chapter are only average times for each trade.

opening of centres with a group intake in the mining regions and building centres in the Ardennes).

On the other hand, in an A.V.T. system, which is essentially based on workers' advancement, a joint intake presents no disadvantage since the worker, who knows when the course will begin, stays at work until he is admitted.

2. *From the point of view of employment of trainees*

According to some the individual departures on completion of the course are calculated to facilitate the employment of ex-trainees. This argument is somewhat specious and most often tends to cover up a weakness in preparation for placing trainees in employment¹; the contrary argument could be used in the case of trades when massive employment takes place at certain times of the year. Moreover the argument holds no weight in the case of recruitment from another region.

Besides, usually, if the creation of A.V.T. courses was decided precisely because of scarcity of skilled labour in a given trade, the distribution of trained students among the various firms in need of labour presents no major difficulty when it takes place at the same time. Finally, group teaching, even if it means grouped intake of trainees, does not necessarily mean they leave in a group.

3. *From the point of view of the method of teaching*

a) *The heterogeneity of the group* that is, the variety of talent and knowledge of trainees before their admission to A.V.T., would seem to favour the individual progress of each one, according to his capabilities. In a « class », if the level of intelligence differs, the knowledge and preparation of pupils are supposed to be equivalent at the beginning of each schoolyear. In an A.V.T. section, on the other hand, not only the basic knowledge but also the working experience already acquired are different for each trainee ; the range of ages in the same group increases the possibility of the existence of different powers of assimilation.

b) On the other hand, individual teaching destroys all *the pedagogical value of the demonstrations* carried out by the instructor and also the *interest of group discussions* in the search for solutions.

4. In collective teaching, the *instructor* is obliged to make

1. To carry the argument further one might wonder how it is possible to put to work some tens of thousands of graduates from technical schools who finish their studies altogether at the same date (end of June).

a special effort to prepare and conduct demonstrations. Unless he is to be faced with an impossible task, the instructor cannot repeat the necessary explanation for each trainee and for each exercise. In individual teaching research is carried out by the trainee with the help of his work sheet and the instructor behaves more like a workshop foreman than a teacher.

5. Two arguments invoked, one for group, the other for individual tuition are only pertinent if the opposite methodology is rigidly and strictly applied.

a) Only the group courses would allow the « team spirit » to develop through performing work as a group, especially on the main structure in the Building industry. Nevertheless, rational development of an individualised programme should enable one to advance or postpone certain exercises in order to permit group work, if a certain number of trainees are capable of taking part, according to the knowledge acquired. In mechanical construction, as in the practical work in the clothing industry, the different operations on one object or garment can be carried out by different trainees, according to the progress made by each of them.

b) Individual tuition should also provide a saving in equipment and premises, especially in the case of trades which require the use of different machines, the number of which would have to be increased in order to allow trainees to operate them simultaneously. But just as individual tuition allows work to be carried out in teams by « staggering » certain exercises, group tuition, except if applied rigidly, allows the tools and equipment which have already been demonstrated to all to be handled at different times. It is not at all necessary, for example, for all the trainees to do a sharpening operation simultaneously.

d) *The various stages of the course*

As far as the giving of explanations and demonstrations is concerned, we can distinguish several types of teaching :

1. *Group tuition proper* with admission and departure as a body. This is applied in France under the system of a single instructor who teaches all the theoretical knowledge in close connection with the succession of practical exercises ; the theory is added at the most opportune moment either before, during or after the execution of the practical work, according to whether it constitutes an indispensable preliminary or an addition to the work, or whether its insertion may cause variety when jobs which take a long time might cause monotony, especially in the initial training periods.

2. *Purely individual tuition with a system of two instructors*, one in the workshop, the other in the lecture-room. The trainee goes from one to the other after he has studied his work sheets, asked for the necessary explanations and worked out on paper a few exercises in order to apply the ideas conveyed. This system is strictly applied in the Netherlands where an instructor with practical experience is allotted to each section while the instructor in theory devotes himself to arithmetic, drawing, and general technology. He must therefore have more extensive training, although less thorough for each of the techniques in the Building or Metal Sectors.

3. *A less synchronised alternation* of theoretical tuition and practical work is achieved in Great Britain where there is a difference between « lectures » in lecture-rooms and « lessons » in the workshop. While the latter are a technology directly connected with the job in hand, and are entrusted to an experienced practical man, the former cover general technology and drawing which are taught, as in schools, according to a fixed timetable, independently of the level attained by each trainee in centres which practise the staggered intake scheme. There is not a single instructor, therefore, but one with practical experience and several specialised in the teaching of theory.

4. Belgium applies the one-instructor system completely, either with group or staggered intake. The recent expansion of A.V.T., which has succeeded the vocational rehabilitation of the unemployed, will bring about the progressive systemisation of a type of teaching which is still empirical.

e) *Additions to syllabuses and methodology*

1. *The preparatory cycles*

The lack of uniformity in knowledge and aptitude of the trainees in a section creates a serious difficulty for A.V.T. training, especially in a system of group tuition. Attempts are made to remedy this :

a) either by selective psychological examination as a basis of recruitment, with minimum requirements for admission. However, France and the Netherlands who thus proceed are sometimes obliged to reduce these minimum requirements, when the number of candidates is limited and sections risk being only partially filled, while the pressure from industrial needs is imperative ;

b) or by preparatory cycles during which, if forecasts of trainees' capabilities are favourable, efforts are made to « refresh » knowledge acquired at school to enable

them to take full advantage of the training. Great Britain and the Netherlands will train or « retrain » candidates in arithmetic, geometrical figures and drawing during the first weeks of the course and, especially in the Netherlands, during the « Grondcursus ».

France organises these preparatory cycles either for workers with an inadequate standard at school (chiefly North Africans) or for candidates for advanced training, for which admission at a standard equivalent to the Baccalaureat is frequently demanded.

2. *Preparation of lessons and demonstrations by the instructor*

France is so far the only country to require of instructors detailed preparation of lessons and demonstrations, established according to the information sheets for each exercise, which latter only contain brief notes, generally to do with the various stages in which the work is to be carried out. This requirement is calculated to raise the standard of tuition by obliging the instructor to reflect upon and prepare his work. Thus improvisation and digression may be avoided.

3. *Use of teaching equipment and of audio-visual aids*

Adequate equipment, in the form of plans, models and other apparatus is often necessary for a demonstration which must appeal to the senses as well as the intelligence.

The preparation, and even the invention of such material is often left to the initiative of each instructor, when the central service has been unable to make adequate equipment on a large scale. As for audio-visual material, the use of which is in fashion, the cost of obtaining and using it is often disproportionate to the efficacy it may have. Therefore A.V.T., which is nevertheless « avant-garde » in its methods, can only make limited use of it.

V. CRITICAL APPRECIATION OF SYLLABUSES AND METHODS USED IN THE DIFFERENT COUNTRIES

1. The necessity for *drawing up syllabuses peculiar to A.V.T.* and applying them by means of *original methods* is almost unanimously recognised today. But the drawing up of syllabuses and the development of new teaching procedures mean a great deal of work. This was made all the more difficult

since A.V.T. (except in France) developed in Ministries and Institutions which were unprepared for handling such tasks and had no teaching tradition¹. From this absence of tradition (and therefore of preconceived notions) there could result a greater amount of freedom in experiments with new methods, provided there were available senior staff capable of mastering such tasks.

As long as the adequate means are not available — especially skilled staff — tuition remains empirical. The profit and efficacy to be obtained from the teaching are lessened and the easiest solution is too often found to be increase in the length of training.

2. The « *integrated* » method would seem the only one fitted to awaken the interest of adults, especially for the acquisition of additional theoretical notions indispensable for the comprehension and practice of the trade. If it is not adopted, there remains only the traditional system, with the tuition given in « branches ». We must emphasise once more that if this system suits young people² it is not advisable for adults for reasons of psychology and receptive capacity.

3. It is the same for the *limitation of theoretical* knowledge to a strictly indispensable minimum. A.V.T. is a « terminal » tuition whose goal is to make the worker capable of plying a manual trade. This limitation by no means excludes the possibility of reaching a higher grade or of subsequently specialising during a second course. But one must avoid the accumulation of a variety of technical knowledge most of which has been badly assimilated or will be quickly forgotten.

The training of future technicians must take place, especially at adult age, in successive stages, alternating with long periods of practical work in the firm.

This rule must also be applied to the practical part of the training. If mere specialisation cannot be taught in A.V.T., thorough tuition in a basic trade must exclude a series of additional specialisations even if these do occur in firms in the nature of craft industries (artisanat)³.

1. AVT usually gets off to a better start in countries which are becoming industrialised and appeal for technical assistance to international organisations. They can thus draw on the technical and teaching experience of industrial countries, without being hindered by somewhat artificial obstacles which, in these countries, result from the historical development of accelerated vocational training.

2. Although the traditional system of general and technical tuition is being questioned more and more.

3. It would be too optimistic to attempt, in an A.V.T. course, to train a general mechanic or multiskilled building worker, such as are often to be found in the country with a knowledge of masonry and bricklaying, shuttering and floor-tiling.

4. *The assimilation process* must constantly make use of *practical activities*. Students should be shown, and made to discover, by experiment ; « ex-cathedra » teaching or teaching based on abstract deduction is inadequate because of the background of the trainees.

5. *With a single instructor*, A.V.T. training often makes demands which are incompatible with the conditions (including the financial conditions) of recruiting. Basically, an experienced man is required but he must be capable, not only of performing perfectly the actual work of a trade, but also of comprehending the problems of the trade. We think all the same that it is better to accept certain failures and weaknesses in theoretical teaching linked with the exercises rather than to divide the tasks among several instructors. Not only will the « integrated » effect be destroyed, but the danger of contradiction is almost inevitable between the explanations given in the workshop by the craftsman instructor and those given in the lecture-room, often on the same subject, by the instructor on theory, whose training will be mainly intellectual.

6. In Holland, the *basic course* (Grondcursus) followed by all the candidate trainees in Building and Metalwork for two or three weeks appears to be the most adequate formula for avoiding a premature choice of trade on the part of the trainee. It cannot be criticised for prolonging the total length of the training ; the time given up to the revision of arithmetic or drawing learnt at school, which is indispensable for producing a minimum background of knowledge at the start of the training proper, may well reduce the diversity in level of trainees, which constitutes one of the main obstacles to A.V.T. training.

7. Having given the respective arguments of the supporters of group intake and staggered intake¹ we think we may conclude by saying that individual teaching is not able to reach the effectiveness of organised group tuition.

As we said before the pedagogical value of the preparation of lessons, demonstration accompanied by instruction, group research and discussion, is lost in individual tuition and the instructor acts as a works supervisor foreman, and not as a teacher. If he had to act as a teacher responsible for describing, demonstrating, explaining and verifying each successive exercise for each of the trainees, who are all at a different stage of learning, his task would be impossible. He overcomes this difficulty by ignoring it, and by the very fact that his job then becomes easier, this enables the managing body to recruit

1. Paragraph IV, Point c.

instructors of a lower standard than that demanded for collective tuition.

We think it is true to say that the system of individual tuition was established for reasons which are perfectly legitimate, but unconnected with methodology, and mainly on account of the advantages it offers in recruitment among the local unemployed.

So as to avoid allowing the diversity of candidates to hold back the quickest and disfavour the slowest in a system of group tuition, an intermediary method could be applied, which might mitigate to a large extent the disadvantages of both systems, at least as far as method is concerned : that is, *group teaching* in the same section (for example 15 trainees) which could take place as follows :

- a) group intake of the 15 trainees on the same day ;
- b) during preparatory training, group teaching with additional lessons to go over school knowledge for the candidates with an inadequate standard ;
- c) the group teaching should continue during the first month of the training proper ;
- d) as from the third month of the course¹, two or three groups (A, B and C) should be constituted, each of which will follow the syllabus at its own speed² ;
- e) in order to encourage competition, allow trainees to pass from one group to another according to the progress of each³ ;
- f) the trainees in each group would end their training course at the end of the syllabus and as soon as there were possibilities of employment.

A reduction of the number of trainees would allow the instructor to take more notice of the slowest pupils, during the last few weeks. Nevertheless group teaching obliges the instructor to repeat the same demonstration two or three times. On the other hand, assimilation is more rapid in a group limited to 5-7 trainees, for instance.

The additional work for the instructor, caused by repetition of the same notions is still considerably reduced since the groups are only formed from the third month onwards, at a time when

1. Preparatory training being counted as a month's course. The indication of time to be spent is only approximate, and must be adapted according to the trade and to the level of each group.

2. If the possibility of individual progress is to be increased even more, while keeping to group teaching, complementary exercises could be added to the programme for the most advanced students in each group.

3. The grouping of trainees according to their capabilities may be accused of discouraging the slowest. As if each trainee did not know (through the marking papers) what progress he and his companions were making !

the importance of theory and demonstration is much less than that of practical work by the trainees ; the length of time spent on each exercise also increases as the course progresses, because of the increasing complexity of the tasks. Moreover, the work of trainees at this period requires much less supervision from the instructor.

Chapter IV

INSTRUCTORS AND TRAINEES

I. CONDITIONS OF APPOINTMENT OF A.V.T. INSTRUCTORS

a) *Recruitment requirements*

The « single » teacher or instructor providing job-training¹ are always recruited from among workers, foremen or craftsmen. From five to ten years' experience as a skilled worker in the trade to be taught are nearly always required, and this rule is only departed from in the event of a marked scarcity of candidates for the job. Attempts to recruit « professional » teachers of technical subjects have been generally disappointing, because of differences in teaching practice. For example, teachers rarely resist the temptation of supplying logical, abstract explanations instead of practical demonstrations.

In the United Kingdom instructors are tested theoretically and practically with in the Ministry but certificates of technical education held are taken into consideration. This means that the instructor has reached the same standard as the guildsman or craftsman of past tradition. In France, candidates must undergo a proficiency test, which takes the form of a test-piece. In the Netherlands and in Belgium, instructors until recently were recruited on the basis of past experience and certificates, after an interview with the head of the centre in the Netherlands, and of the regional office in Belgium. In the latter country, new regulations however provide that instructors shall be progressively recruited through a national competitive examination consisting of a practical and an oral test in the technological subjects of the trade.

The teachers of class-room subjects in the Netherlands are chosen from among graduates of technical secondary schools.

1. We shall give the same meaning to the terms « instructor » and « moniteur ». Etymologically the former emphasises the teaching function, whereas the latter stresses the practical, demonstrative aspect of teaching.

b) *Status of instructors*

Instructors can be treated as government servants (just as ordinary teachers or apprenticeship instructors under the State School system) or be bound by private contract to the central managing authority for a limited period of time. The former solution is adopted in Great Britain and the Netherlands (where instructors become government servants after a short probationary period) and the second in France and Belgium.

Such instructors consider that civil-service status is in itself a guarantee of stability. Nevertheless, the organization of A.V.T., owing to its very nature and objectives, which are closely geared to fluctuations of the employment market, can hardly be reconciled with the idea of the permanent stability of its specialised staff. Although A.V.T. as a whole has become an indispensable adjunct of today's economy, this trend does not mean that every course relating to each particular trade in a specific region should continue to be given indefinitely. On the contrary, if new sections are rapidly to be opened up, it must also be possible to close others and dismiss the staff in charge. When instructors are employed by the government, it is no doubt possible (as in Great Britain) to transfer them from one region to another¹. When A.V.T. activity decreases, not in one particular region but in a certain number of trades throughout the country, other remedies, such as the versatility of individual instructors, must be found. This solution is only possible if the most important quality in an instructor is considered to be his teaching gifts and experience rather than his technical attainments².

Good, all-round professionals are in fact hard to find, except in closely related techniques³.

Even from the instructors' point of view, we think it inadvisable to claim civil-service status. The risk of unemployment is largely theoretical, since the best instructors will often be enticed into private industry, where knowledge and experience of their job may be turned to profitable account in the training services of the firm.

Lastly, even when instructors are employed under a private arrangement, as in France and Belgium, experience shows that the managing authority seeks to ensure stability for its best

1. Although in the United Kingdom all instructors are first under temporary contract, civil-service status can be acquired later.

2. The Netherlands theory instead is that in individualised tuition, proficiency in the trade is the decisive factor to look for when choosing instructors, and that it is unrealistic in most cases to insist upon teaching abilities as well.

3. As in masonry and formwork, machine fitting and tooling, different kinds of welding, plumbing and central heating.

4. Except for older instructors.

instructors in practice, such as by renewing their contracts, without recourse to legal guarantees but by arranging transfers from one region to another, making use of their knowledge of other trades or giving them temporary jobs in the central services.

c) *Remuneration and promotion of instructors*

When instructors are State-employed their salaries are the same as those of employees at the corresponding level or in general government administration. The difference between the scale of salaries in the public and private sectors, which is characteristic of the present period of economic expansion, deters some instructors from demanding civil-service status. In the private contract system, as in Belgium, salaries are based on those in the private sector. This flexibility moreover allows the engagement of specialists able to teach certain courses (for example, on new trades) since they can be offered salaries which the public services would find difficult to provide.

Although in France instructors are bound by private contract, salary scales are fixed by the Ministry of Labour and are closer to the salaries of civil servants than of workers in the private sector, which tends to lower the standard of recruitment under present circumstances.

Opportunities for promotion must be available for the best instructors, either as chief instructors (where such posts exist, as in Great Britain) or in the technical and administrative management of the centres (France). However, opportunity for this latter type of advancement is largely lost when the management and technical staff of the centre each have a different status, as in Belgium.

II. TRAINING OF INSTRUCTORS

a) *Nature of the problem*

The instructor is and must be recruited from among men with job experience rather than from among intellectuals who hold technical degrees. The erstwhile skilled worker, supervisor, foreman or craftsman is however unprepared for his new assignment, which is to transmit his knowledge to others. The time is now past when experience in the trade alone was regarded as important, and the gift for teaching as an innate quality rather than a technique capable of being acquired.

This awareness of a new need (to meet which different solutions are required from those adopted for the apprentice instructors trained in vocational teacher training colleges) does not mean that the four countries have yet adopted satisfactory

answers to the problem. Pedagogical principles and methods enabling the new instructor to perform his new tasks, must also be taught at an accelerated pace rather than in courses which extend over one or more years, not only because the training which the A.V.T. instructor must provide is based on different considerations, but because the time is too short for any lengthy coaching in teaching practice when economic necessities require that courses designed for the trainees open at an early date.

Teacher training for A.V.T. instructors must moreover be adapted to their intellectual capacity which at a higher level is akin to that of the adult trainee¹. Training must enable the « single » instructor not only to give practical demonstrations in the trade according to A.V.T. principles, but to teach technology, arithmetic, or even drawing.

Finally, when the standard of candidates is not very high even from the trade standpoint, it has been found necessary, as in Italy, to prolong the course in order to complete the instructor's own job training.

This solution, imposed by necessity, increases fourfold and even tenfold the duration of the longest courses organised elsewhere for instructors, since in Italy the introductory courses last 22 weeks while in the other countries they vary between two and six weeks.

b) *Instructor-training syllabuses*

1. At Letchworth Instructor Training College, north of London, the course lasts three weeks. Teaching training courses are given to G.T.C. candidate instructors and to instructors from industry responsible for training within firms, especially that of apprentices. Subsequently instructors undergo T.W.I. courses elsewhere.

The course includes teaching advice (presentation of lessons, use of methods of expression, use of the blackboard and audio-visual aids) together with criticism of sample lessons on subjects chosen by the trainees.

2. A similar principle is followed by organisers of induction courses for instructors in the Netherlands, who are sent for a week to the Naval Instructors' School, and then assigned for a short period to an experienced instructor. Later, seminars are periodically organised, with technical rather than pedagogical slant, since they are designed to acquaint instructors with the new techniques of the trade by means of lectures, films, visits to factories, etc.

1. See chapter III, paragraph I.

3. France has taken furthest the systematic training of instructors in six-week training courses at the Institut in rue Dareau. Instructors are grouped into trades or groups of trades (such as structural work in the building trades) and the programme introduces A.V.T. principles and methods and shows how they are applied to exercises in the specific programme for the trade or trades covered by the course.

4. Belgium, which under its vocational retraining scheme for unemployed workers had only managed to organise, as an exceptional measure, short training courses for some of the instructors available, is to make up for lost time by creating an Instructors' Training Centre, with the help of the International Labour Office. This centre will first remedy shortcomings in the teaching qualifications of Belgian instructors, and then train a reserve supply of instructors to provide technical assistance, and will also be able to accept the technicians from private industry.

The syllabus is likely to be largely influenced by the Institut in rue Dareau, since the senior staff at the centre was trained in France.

c) *Critical examination of the different training systems*

1. The system applied in Letchworth, by bringing together instructors from different trades and jobs, enables the sample lessons to provide a good idea of how actual training will later take place. The « pupils » who follow the sample lessons are not familiar with technical material taught, and in carrying out the various exercises quite naturally commit the usual mistakes of ordinary « beginners ».

2. The British system however maintains that effectiveness can only be achieved through the use of instructors with such intellectual attainments as to be able to apply the rules and methods recommended by the Training Institute in the teaching process of their particular jobs. Whereas in France, instructors have the opportunity during their training of trying their hand at many of the demonstrations they will ultimately have to perform and conduct. They thus study the teaching manual while learning to apply its methods.

3. Belgium will have to devise some original scheme in adapting French methods to a system of staggered intake which it cannot abolish in certain centres without a transitional period.

4. Although a six-week training course does not appear over-long, it has the disadvantage of introducing too many new ideas all at once, which are consequently difficult to absorb. When the geographic possibilities of the country so allow, it would be bet-

ter to curtail the first phase of training and follow it up shortly afterwards with an additional course.

5. Whatever the system adopted, periodic refresher courses are necessary, including both a review of principles and methods and coaching in new techniques of the trade. Although a centre cannot hope to keep up with technical developments in industry, especially when this means acquiring expensive equipment, the consequences of an out-dated method of teaching, particularly when the instructor is an older man and set in his ways, are more harmful in A.V.T. for adults than in the traditional vocational courses for adolescents. The former must thus allow the ex-trainee to master the most usual jobs at building sites and in factories, while the latter increasingly tends to provide an extensive basic technological knowledge in several fields, and allow students to become adapted to the new job in the firm later on.

III. RECRUITMENT AND SELECTION OF TRAINEES

a) *Age*

A.V.T. is designed for adults, but a moot question is the upper and lower limit of admission to training.

The rules applying in the Netherlands and Belgium usually make it possible to begin an A.V.T. course at the age of 18. In France the age of admission has dropped to 17, while in Great Britain it has not been definitely established (generally 18 with exceptions in certain trades).

In practice, however, the vast majority of trainees in the Netherlands and Belgium are recruited from the 21-30 age-group and especially the 21-25 age-group. It is in Great Britain that the average age of trainees is highest, owing to restrictions governing admission to the G.T.C.'s. In France, on the other hand, more than half the A.V.T. trainees are recruited from the 17-20 age-group, hence before military service, which is rather the exception in other countries.

In Belgium a project is being studied which would lower to 16 the age-limit of candidates for the building and clothing industries.

Theoretically, the upper age-limit is 35 in France¹, 55 in the Netherlands and undetermined in Belgium and in the United Kingdom.

This relative difference in the theoretical age ceiling is only of minor importance, since in practice, whether in accordance with central services rules or otherwise, 90 to 95 per cent of the trainees are under 35 ; trainees over this age-limit are nearly

1. This stipulated upper limit has recently been abolished.

always admitted on exceptional or personal grounds (for example disabled trainees).

b) *Requirements as to job experience and prohibitions*

We have already mentioned the severe restrictions which limit entrance to the G.T.C.'s in Great Britain¹ where even long periods of unemployment are not always a valid criterion. In the Netherlands, the concept of centres for the sole use of unemployed workers still prevails, although in practice this principle is loosely applied, since a worker who has left his job voluntarily or involuntarily can be considered as unemployed the next day. Employed workers can only be admitted to the workshops for accelerated apprenticeship if introduced by their employer, who must agree to continue wage payments during the course².

Since 1961, France and Belgium have offered the most liberal entrance requirements, as in practice the centres are open to all workers who wish to learn a trade. In France, however, admission depends on the results of a psychotechnical examination, while in Belgium the candidate must supply proof of a previous paid or independent occupation.

For obvious reasons it is usually forbidden to take an A.V.T. course several times, whether in the same or a different trade ; workers skilled in a trade are also barred from attending an A.V.T. course. Exceptions can be made for valid reasons usually left for assessment by a central service³.

The bar against attendance at a second course is not usually applicable to a course at secondary level or to additional specialisation in a basic trade (Belgium).

c) *Preliminary psychotechnical examination*

A preliminary medical examination to test the worker's physical capacity for his trade is the rule everywhere. It however sometimes forms part of the psychotechnical examination, particularly in Great Britain in the case of disabled workers.

The psychotechnical examination, which in the Netherlands and France plays an important part in determining the admissibility or exclusion of candidates for A.V.T. training, is not resorted to in Great Britain, and only takes place occasionally in Belgium with no conclusive weight attaching to the results. This illustrates the scepticism of these two countries in regard

1. Chapter I, B, 2.

2. This condition was an obstacle for the admission to A.V.T. courses for workers employed in firms.

3. Several reasons may warrant attendance at an A.V.T. course for the second time : personal reasons (illness or accident) or economic reasons (obsolescence of a technique learnt in the first course). Steps must nevertheless be taken to prevent workers from « collecting trades ».

to the ultimate value of such tests and examinations for ascertaining the aptitude of candidates for learning a given skill. Besides lacking adequate facilities¹, Belgium is beginning to react against the misuse of tests as a convenient loophole saving the organisers the trouble of making an effective selection, which allows for all the personal factors contributing to a balanced choice when the number of candidates for a certain trade is greater than the number of places available (past experience, motivations, social background of the candidate, etc.).

France has established minimum entrance requirements for each of the trades taught at the centres ; if the candidate examined does not come up to standard he is advised to choose a trade where the training is less demanding.

In the Netherlands, the job analysis services have grouped all occupations into categories, numbered from one to seven in order of increasing complexity ; only the jobs in groups three to five can be taught in accelerated courses. The psychotechnical examiner takes this classification into consideration by placing the candidate in categories three, four or five, which correspond to a specific number of jobs that are taught. The choice of each candidate is therefore limited to a small number of trades ; selection is made even more limited by the additional indications given by the examination as to the physical effort each individual is capable of expending in relation to the demands of each trade.

This strict classification can however be modified after observation during the « Grondcursus ».

In France, the psychological examination imposed on the candidate is now limited to a general pencil-and-paper intelligence test followed by an interview ; the psychomotor tests formerly used have been abandoned after experimentation, but are used in the Netherlands to complete the indications supplied by the general intelligence test.

d) *Who authorises admission to training courses and what criteria are used ?*

In France the admitting authority is the Departmental Director of Manpower which corresponds in Belgium to the Regional Director of the National Employment Office. In the Netherlands it is the Director of the Centre itself while in Great Britain the admission of candidates is the responsibility of a committee which generally includes besides the Centre Manager, a delegate from the regional employment office, a delegate from the federation of employers and a trade-union representative.

Without being bound by the results of the psychotechnical examinations, the responsible authorities in France and the Netherlands usually respect their conclusions.

1. Which it is hoped, will be created in 1965.

A genuine policy of selection nevertheless implies that the responsible director should be able to make a balanced choice from among a number of candidates greater than the number of places available in the various sections of the centre.

This has not always been the case in recent years, and many sections operate with a limited number of candidates, especially in France and the Netherlands. A similar situation in Belgium was improved by considerably increasing chances of admission. Yet sections which teach the more sought after trades (for example : welding, machine-tooling and brickwork) are still disproportionate to those concerned with less popular trades (such as ceiling-work and floor-laying).

When this disproportion is generalised, the managing authority, hard-pressed by industrial needs, is greatly tempted to lower entrance standards. France and Belgium have for several years followed, with or without psychotechnical tests, a policy which partakes more of the nature of a recruitment campaign than of proper selection, while the Netherlands still appear to sacrifice quantity to quality¹.

An interesting venture in France is the clearing-house system, which places trainees in sections throughout the country according to the opening dates of each course ; this implies that trainees must be able and willing to move about the country, a process which is helped by the youth of the majority and by free lodging.

e) *Critical analysis of A.V.T. admission policy*

1. The age-barrier, which in fact if not in theory bars older candidates from admittance, also stands in the way of any policy of redeployment. Since workers of around 45 years of age or over in practice are affected, it banishes any prospects of promotion for middle-aged workers, and a more serious drawback is that it can impose a sort of premature retirement by dooming to permanent inactivity a great many workers deprived of their jobs after reaching this age limit.

Pedagogical considerations are rarely mentioned as an explanation of this barrier ; indeed it would be difficult to argue that the capacity for learning and adaptation disappears after a fixed age-limit. The A.V.T. authorities usually agree that the capacity for adaptation is a personal affair, but maintain that on the whole workers assimilate movements and new technological ideas more slowly after 35 or 45 years of age.

This age-limit seems rather to have been imposed not for

1. The personal effort which the trainee must make to follow work-sheet directives in the purely individual instruction given in the Netherlands requires greater ease of comprehension than in group instruction.

pedagogical reasons but because of the greater difficulty of finding jobs for older workers at the end of the course. Although the consequences are masked by present economic expansion, a policy restricting employment and consequently accelerated training for workers over 45 would be unwarranted and indefensible if the present growth trend were reversed or attenuated¹.

2. We do not think that the age of admission to A.V.T. courses should be lower than 18. The danger of competing with technical schools is undeniable in countries where the vocational training of adolescents largely follows traditional schools patterns. In our opinion, the reason France attracts so many young people into A.V.T. is to make up for the scarcity of institutes preparing students for the « C.A.P. », where large numbers of candidates are annually refused for lack of space.

The syllabuses and methods of A.V.T. have been devised for adults. An accelerated acquisition of knowledge, which is acceptable for adults, is unwarranted where adolescents are concerned. Even the most ardent supporters of A.V.T. must not lose sight of the fact that subjects not strictly related to the job must be sacrificed and that the basic technical and theoretical knowledge imparted in A.V.T. is limited in scope.

Emergency measures cannot take the place of normal solutions, which should be made available to a maximum number of candidates desirous of learning a trade.

On the other hand, this objection would no longer be relevant in the event that A.V.T. were regarded as a substitute for long-term apprenticeship, as practised in Great Britain and the Federal Republic of Germany. Sweden has recently taken such a line².

3. The armed forces are an important source of recruitment for A.V.T., since ex-servicemen often choose another trade because of new responsibilities they must face upon release.

A trainee may lose the benefit of an A.V.T. course followed before military service if upon completing the course, he has lacked an opportunity to practise his new trade for a sufficient length of time. The Netherlands solution of allowing trainees to begin accelerated training before military service and conti-

1. The result of this would be that the last chance of obtaining work would be lost for a number of workers aged from 40 to 45 whose re-employment even without training is made easier today by economic prosperity.

2. The reader is referred to chapter VII for an examination and critical analysis of the part played by A.V.T. in relation to traditional apprenticeship methods. In the present section only the relationship between the minimum age of admission and general A.V.T. policy is examined.

nue it later seems hardly satisfactory. In other countries attempts to complete in the armed forces training started earlier have in general proved unsatisfactory since military routine and such activities are difficult to reconcile.

4. A critical appreciation of the value of the psychotechnical tests which are the main criteria for selecting A.V.T. candidates would appear a somewhat delicate task. Nevertheless the worst mistake the admitting authorities could make would be to follow the example of parents who shift the responsibility of choosing a trade or school for their children on to a vocational counsellor.

The result of a psychotechnical test is one among many factors contributing to a decision which will affect the future career of a man and the pattern of his whole existence ; when the tests themselves are supplemented by an interview and enquiry into the past experience, motivations and social background of the candidate, the decision has greater value ; it remains to be determined whether the interview should be conducted by the psychologist or the head of the centre. The decision of the latter, even when based on a series of factors which include the result of a possible test, must later be corrected by the instructor's findings during the first weeks ; the happiest solution in this connection is that of the « Grondcursus » in the Netherlands which begins by only requiring a choice between the building and metalworking trades, and delays the choice of specialisation until after a trial period which lasts a few weeks.

5. Entrance examinations for some courses which test, not aptitude, but knowledge, cannot be criticised. While in the Netherlands knowledge of basic subjects, especially arithmetic, is supplemented or refreshed in the « Grondcursus », France organises preparatory and even correspondence courses for A.V.T.¹, as when candidates are to be recruited who are insufficiently prepared for a higher-level course.

IV. ADVANTAGES GRANTED TO A.V.T. TRAINEES

Unlike the ordinary student, for whom the payment of wages during training has not progressed beyond the claim stage, the A.V.T. trainee of any age receives various allowances to make up for the earnings he forfeits during the period of training. Apart from the financial repercussions which would result from the adoption of a study wage, the reasons alleged for this difference in treatment seem to be that the student, even when

1. Lasting 12 weeks, in particular for candidates for courses in the building trades who have had little formal schooling (mostly foreigners) or for candidates for courses in certain metalworking trades which require a minimum knowledge of arithmetic and geometry.

an adult, has not yet entered a productive category, whereas even the young A.V.T. trainee has postponed or temporarily suspended his productive activity.

In nearly all countries most A.V.T. trainees are however adults who must satisfy their own needs and often those of a family. Nevertheless, when a large number of trainees (for example between 17-20 years of age) belong to age groups which for the most part are financially dependent on their families, the danger of « unfair competition » and discriminatory treatment may arise, between A.V.T. trainees and students from vocational and technical education.

The amount of the grants allowed during A.V.T. courses has usually been fixed at the level of the minimum living wage as defined under collective agreements or by law. The basis of reference, which is the wage earned at 21 years, is varied according to differences in area, age and sex¹.

Although the desire at first was to guarantee a normal wage for the unskilled worker who was employed, and the same wage for the unemployed worker, so as to encourage both to follow A.V.T. courses, the rise in real wages compared with the legal or agreed minimum wage, owing to labour shortages, created a considerable difference between the allowances granted to A.V.T. trainees and the actual working wage, except perhaps in Belgium, where amounts paid have been fixed more recently.

Total payments to trainees may be subdivided as follows :

1. A basic allowance paid in all four countries, which replaces wages ;
2. The reimbursement within certain limits of the daily or weekly cost of transport from the trainee's home to the centre ;
3. Bonuses to encourage trainees, the amount of which varies according to the length of the course (Belgium) or contributions made by the trainees (Netherlands) ;
4. Allowances granted to certain trainees by trade organisations in order to compensate for the inadequacy of the basic allowance (France) ;
5. A bonus at the end of the course, often in the form of tools whose value either depends on the length of training (Belgium), or in such amount as is needed to practise the trade (France, Netherlands, United King-

1. Even if the differences between men's and women's wages — stipulated by law or collective agreement — is being progressively reduced, especially as a result of the implementation of the Treaty of Rome, it still exists in fact because of jobs almost entirely performed by women for lower pay, whereas comparison could be based on standards of qualification in corresponding men's trades. Hence women trainees in the clothing sections, for example in Belgium, usually receive a lower basic allowance than men trainees.

dom). Sometimes these bonuses are only granted after the trainee is settled in his job.

6. A housing allowance (Belgium, Netherlands), and free lodging at the centre for trainees who cannot return home every day¹ (France, United Kingdom).

The fact that in Great Britain the accelerated training courses are concentrated in 14 centres² throughout the country means that at least half the trainees must be boarded.

This is also true of France ; although the number of centres is much greater (over 100) no single one can offer the large variety of trades for which France organises A.V.T. training and quite a number of candidates, independently from the actual organisation, must travel extensively if they want to learn a trade.

*
**

If allowances given to those who attend A.V.T. training can be diversified, at what level had the total amount best be fixed ? When the amount is much lower than the real wage of an unskilled worker, only a worker out of a job will be induced to enrol for an A.V.T. course ; even then, when labour is scarce, he must not be the sort of man who can find some sort of job at any time. We do not think it desirable, however, that allowances should equal the wage earned for unskilled work in industry. This may encourage a certain amount of non-professionalism among workers who have the option of choosing, for the same wage and for a limited amount of time, between the more demanding and heavier tasks in industry and the lighter work of vocational training if the necessary effort is not made. A higher allowance ceiling, and the consequent increase in candidates, can no doubt be counterbalanced by a rational policy of selection. The best proof of the trainee's genuine desire for training would in our opinion, be his acceptance of a moderate financial sacrifice for a few months, with the prospect of a higher wage for the rest of his working life.

1. See in the annex III, tables of allowances given to A.V.T. trainees in different countries.

2. Plus three special centres for handicapped workers.

Chapter V

A.V.T. MANAGEMENT

I. ADMINISTRATIVE ORGANISATION¹

In each of the four countries administration is the product of the historical origin and development of A.V.T. rather than of rational organisation, except in France since 1949. It also bears the mark — positive or negative — of the regulations and statutes which govern the organisations of which it has become a part.

a) *Connection with employment services*

In two countries (Great Britain and Belgium) A.V.T. maintains fairly close connections with the unemployment insurance departments of regional employment offices. In all the countries it co-operates more directly with the employment services, whose main purpose is to select candidates and find them jobs upon completion of the course.

The close connection with employment services can be explained and justified chiefly by the need to plan the opening and closing dates of courses according to the short and medium-term needs for skilled manpower. In countries where the employment services since the war have retained a certain amount of control over recruitment and dismissals in firms, basic though imperfect indications are available as to manpower resources, reserves and needs.

But whenever in an expanding economy the amount of accelerated training is well under requirements and limited to a few thousand units, no accurate method of estimating future shortages in the various trades has been regarded as necessary. Great Britain, the Netherlands and Belgium rely on information provided by the regional services, in their day-to-day activities,

1. Since the administrative organisation of A.V.T. in the different countries has already been described in the O.E.C.D. publication (1960) and in various brochures officially published by the management authorities, this paper is limited to a critical examination of efficiency and of the difficulties encountered according to the type of organisation adopted.

supplemented by enquiries made from industrial associations. In France, on the other hand, where the numbers trained by A.V.T. reached 30,000 in 1963 — which, it is hoped to increase considerably in 1964 — a much more precise forecasting method is becoming necessary. The Commissariat Général au Plan must not only consider probable industrial growth by sector and region, but also analyse the volume of supply from other forms of vocational training, particularly technical education and apprenticeship courses.

b) *Structure of A.V.T.*

1. *Financing*

In three countries (France, United Kingdom, Netherlands) A.V.T. running expenses are entirely covered by the State budget. The situation is more complex in Belgium where the National Employment Office, of which A.V.T. is one of the activities, is largely financed by a percentage of employers' and workers' social security contributions, with an additional subsidy from the State.

2. *National managing and authority*

In the United Kingdom A.V.T. is a service provided by the State, under the direct management of a Department of the Ministry of Labour. This is also true of the Netherlands, where accelerated training comes under the National Employment Office. In Belgium also A.V.T. is part of the general activities of the National Employment Office, although the latter is a semi-public body enjoying considerable autonomy under joint employer/worker management.

In France, on the other hand, the management of accelerated vocational training has been entrusted to a special organisation, founded in 1949 for the purpose, whose Board is constituted on a tripartite basis.

3. *Allocation of prerogatives and powers*

The duties and powers of day-to-day management in each country are divided among various bodies, such as :

- a) a specialised national A.V.T. authority.
- b) administrative, financial or inspection services independent of the A.V.T. authority ;
- c) regional employment offices ;
- d) the centres themselves.

4. *Role of trade organisations*

Employers' and workers' organisations exert action through national or regional commissions, either joint (Belgium and France) or tripartite (Netherlands, United Kingdom). They are

attached either to the regional employment office (United Kingdom, Belgium) or the centre itself (Netherlands) or to the departmental office (France). There are also specialised national industrial sub-committees in France. These committees only have consultative powers, and no power of action (except the Management Committee of the National Employment Office in Belgium and the A.N.I.F.R.M.O. in France).

5. *The centre as an administrative unit*

In three countries (France, United Kingdom, Netherlands) the centre is an administrative and technical management unit headed by a principal or manager. Its finances and accounts are supervised by a specialised government committee, and its rules are dictated by the central A.V.T. authority. In other routine management aspects, a certain dualism persists owing to the absence of any clear definition of the respective powers of the specialised central services of A.V.T., the regional employment offices, and sometimes the provincial or regional inspection services.

In Belgium A.V.T. has not yet reached the stage when centres can be independently managed, and the daily tasks of administration are divided between the employment, supply and accounting services in the regional offices, which each receive instructions from their various national headquarters. The fact that the courses are widely dispersed over a small national territory makes self-management of the centre difficult, and thus the various central agencies intervene more often. A re-grouping is under way, helped by the building of premises in a certain number of regions.

II. REQUIREMENTS FOR A.V.T. ADMINISTRATION

1. A.V.T. management has economic, administrative and technical facets, and decisions at one such level affect the other levels. The division of responsibilities detracts from the effectiveness of action, as often occurs when tasks are allocated among various services each under different national or regional headquarters, which each have a different point of view owing to the diversity of their own special duties.

2. This does not mean that A.V.T. management or the administrative authority should not divest itself of duties which do not directly affect its efficiency, for example :

- a) Bookkeeping and the settlement of accounts (Belgium) ;
- b) The supply of standard equipment for the centres, when delivered by a central purchasing agency responsible for meeting the needs of public services (Mi-

nistry of Public Works in United Kingdom and the Netherlands).

- c) The economic study of manpower needs, which influences the expansion of activities in the different sectors (France).
- d) The selection and placement of trainees, although these tasks are directly linked with operating conditions at the centres¹.

3. The technical and teaching function must be completely centralised, with all that this implies in regard to programmes, teaching instructions, organisation of the centres themselves, decisions concerning supplies, selection of technical staff and trainee requirements. It is vital that in such matters all regional agencies should come under one single central headquarters.

4. A.V.T. must be so flexibly administered as to be able to take the rapid decisions required for a continuous and immediate adaptation of courses to the fluctuating needs for skilled labour. In countries where government services are subject, for expenditure on decision-making, to controls which delay decision-making, independent management is a solution to the problem (e.g. A.N.I.F.R.M.O. in France and O.N.Em. in Belgium).

5. In committees operating at various A.V.T. levels employers' or workers' organisations can exert influence in the following directions ;

- a) promoting the creation of sections according to industrial needs ;
- b) counterbalancing administrative tendencies which might reduce management efficiency ;
- c) shaping the content of programmes, for example by ensuring that they keep pace with changes in production technology ;
- d) checking that programmes conform to the general interests of firms in a sector and offer real training opportunities to workers ;
- e) facilitating trainee employment and determining rate of pay upon recruitment.

The trade unions in particular were long concerned with claims alone (allowances and special conditions for trainees, emoluments of A.V.T. staff, etc.) rather than with the technical problems affecting the standard of A.V.T. training. Action from this latter aspect however requires that both union representa-

1. See section III of the present chapter.

tives and employers' delegates be chosen from among technicians of the relevant sector, which is not the case when their organisations can only act through unspecialised joint committees covering only general duties (regional advisory committees in Belgium).

III. CENTRE MANAGEMENT

The management of a centre, regardless of its administrative hierarchy, covers many fields. In a medium-sized centre, which may, for example, consist of six building industry sections and six metal-working sections with a capacity of about 150 trainees, numbers of staff in France, Great Britain and the Netherlands vary between 35 and 25, according to whether or not board and lodging are supplied by the centre itself.

This establishment is usually made up as follows¹ :

1. A Centre manager, plus (in France and Great Britain) an assistant manager ;
2. One instructor per section, plus 2 chief instructors (Great Britain) and 2 instructors teaching theory (Netherlands).
3. A store-keeper and in some instances an assistant store-keeper.
4. An accounting department, including a head book-keeper and 2 or 3 employees responsible for paying out trainee allowances ;
5. The lodging and canteen service.
6. Maintenance (equipment and tools) and cleaning staff (premises).

The management of a centre organised as a technical and administrative unit must perform the following duties :

1. General internal organisation and co-ordination of activities in the various sections.
2. Contacts with firms, to inform them of section activities and prepare for the placement of trainees² ;
3. Liaison with the national A.V.T. authority and regional employment offices ;
4. Daily supervision of the trainees' work and instructors' teaching activities ;
5. Supervision of intake and output planning in the various sections ;

1. The list is approximate and is meant to provide general average indications ; it was considered unnecessary to supply detailed figures according to the size of the centre and its particular organisation in each country.

2. There is no overlapping with the employment-service when a firm, before employing the trainee, desires to ascertain the amount of knowledge he has acquired.

6. General supervisory responsibility for store management and procurement, and for the proper conduct of financial operations.

Just as in an academic establishment, where the duties of a headmaster appointed because of his scientific or teaching attainments may be confined to administrative tasks, the manager of a centre is often called upon to sacrifice essentials for more urgent routine work, especially as the penalty for administrative negligence is immediate, while the evidence of far more serious omissions in technical or teaching matters only long afterwards becomes apparent.

The solution is to provide the manager who of course cannot neglect his general responsibilities, with a technical assistant who is responsible for checking the observance of programmes and methods, as well as the results obtained by trainees, that is, who devotes himself exclusively to the teaching side. If the manager has received technical training, the roles could be partially reversed.

In Great Britain the chief instructor co-ordinates the teaching in a sector consisting of five or six sections, directly supervises the teaching activities of the instructors, personally helps the new instructors, and provides for the co-ordination of practical work and the use of tools between several related sections.

In the Netherlands, one of the theory instructors assists the principal of the centre¹.

This allocation of technical and teaching responsibilities may appear surprising, since the central A.V.T. administration in all countries employs a corps of technical inspectors who are usually specialised in some job group. The technical inspection board, however, can only make periodic sample surveys, while an efficient A.V.T. methodology implies day-to-day assistance and supervision on the part of senior staff of the centre itself.

IV. RECRUITMENT OF CENTRE MANAGEMENT STAFF

When A.V.T. is run, as in France, by a separate unit especially created to perform this function, the appointment of management staff usually takes place by promotion, according to rules which have not yet hardened into administrative tradition.

Additional staff is constantly recruited through this body either from among technicians in the private sector or, less often, from among staff of other administrations. The main difficulty encountered by the French A.V.T. organisation has

1. We have already mentioned that Belgium does not yet have an individual management authority for the centres.

been the maximum pay rates allowed for the various staff positions, which are based on those of the public sector.

The technical assistants in France and the chief instructors in Great Britain are usually recruited by staff promotion, and have consequently been trained according to the same principles.

Although in Great Britain a certain tradition reduces the disadvantages of choosing of A.V.T. senior staff from the civil service, the Netherlands and Belgium encounter serious difficulties since they recruit A.V.T. management staff from organisations designed for the performance of other duties. Especially when staff promotion has been subjected to such strict standards as seniority, the resulting rigidity which is incompatible with the selection of efficient, dedicated staff can only be avoided if technical examinations and outside recruitment are organized¹.

Finally, A.V.T. management staff should not receive instructions only from a central service at short seminars and meetings generally dealing with economic and administrative aspects. An evident need is that they be coached at briefing sessions (which last two weeks in France) in the pedagogical and technical principles of A.V.T., and that they acquire some knowledge of the basic training given to instructors. Otherwise the danger on many counts is that management, technical and administrative staff, will fail to understand one another, especially as the members who perform these duties frequently come from different backgrounds and have each acquired a turn of mind marked by the particular responsibilities they have assumed².

1. On the other hand, the French and Belgian systems in regard to instructors have remained very flexible, whereas Great Britain and the Netherlands have given most of their instructors civil-service status.

2. The administrative officials of the Belgian centres took part in the first sessions on training techniques which were organised by the instructors-training centre.

Chapter VI

DIVERSITY AND EFFICIENCY OF A.V.T.

I. STANDARDS AND SCOPE OF A.V.T.

Originally the number of trades covered by A.V.T. courses was very limited, consisting at most of ten skilled trades in either the building or metal industries. These were the basic trades in each of these sectors for which there were, or could be, classes in the traditional trade schools; the Netherlands have kept to this limitation.

Diversification has been much greater in France, where, counting both approved centres and centres subsidised by firms, A.V.T. training has been organised for almost 200 trades. This figure may appear surprising at first, when it is realised that A.V.T. methodology was originally devised for the teaching of skilled manual jobs.

a) *Nature of diversification*

The original field of activity has been extended in several directions :

1. To new industrial sectors : chemistry, electronics, the hotel industry, agriculture, office jobs, hairdressing, and other trades, have been added to the building and metalworking. In Great Britain and Belgium these courses were occasional rather than permanently organised.

2. To women's trades : although women can in theory gain access to all A.V.T. sections, in practice mixed courses have been held in only a limited number of trades ; it would be difficult for A.V.T. to be an innovator of industrial job habits.

In France, courses in electricity, electronics, mechanical drawing and office work are the ones most often attended both by male and female trainees.

On the other hand, sections for teaching trades traditionally limited to women have been created in France and Belgium, especially in the clothing and hotel industries.

3. To levels below actual job standards, but only exceptionally, although apart from subsidised centres established within industry¹.

Apart from a few courses for uni-skilled welders, whose training can be completed in a few weeks, women's training is given in such occupations as the clothing industry (stitchers and sewing-machine operators), where the technical content can hardly be compared with the standard of training of a worker in the building or metalworking industries. But although less technical, the programme includes motion analysis, methods studies, the evaluation of conditions required for optimum performance, etc.

4. To levels higher than traditional job qualifications. This is a fairly recent development, but one which in France is markedly increasing as « second-degree » training. This includes courses initially requiring a general basic training of a fairly high standard, and courses for promotion accessible to workers who have already acquired a skill.

The first category includes technicians in electronics and plastics, specialists to work in nuclear energy, and private secretaries ; the second, foremen and superintendents in the building industry, and development draughtsmen².

b) *Operation of « second-degree » training*

1. *Justification of its necessity*

Several surveys have already shown the increasing need for technical supervisory staff in the next few years, especially as a consequence of industrial automation.

Notwithstanding its development and evolution, traditional technical education does not appear capable of meeting these new needs in sufficient quantity, in spite of the development both of full-time and of part-time courses intended for workers already employed in firms. The idea of a « career » does not attract enough candidates to satisfy the increasing requirements, mainly as a result of social attitudes which govern the choice of studies. There is an ever widening gap between young people whose intellectual capacity and financial means enable them to aim for a classical baccalaureat or higher technical studies and those who begin vocational courses leading to some occupational skill of which only the best continue to a second degree level.

The complexity of the mechanism of modern production

1. See section IV of the present chapter.

2. Although these courses are occasionally accessible to candidates with a general technical training instead of a job proficiency.

no longer makes it possible to remedy shortages by promoting skilled workers within the industry itself, whose general and theoretical knowledge does not come up to job requirements.

For this reason, a number of « second-degree » training courses have been created in the last few years, chiefly in France, where shortages are moreover liable to increase owing to the too slow rate of growth of technical education.

2. *Selection of trainees*

Candidate-trainees undergo an entrance examination which tests their general level of knowledge, and is of the same standard as the examination for a secondary-school science or mathematics baccalaureat, or a literary baccalaureat (for admission to office administration courses).

In each country, there is a reserve supply of young people who have completed their secondary-school education and have gone no further (as though their education were complete) or who for various reasons have had to give up university study.

Lacking any skilled occupation, these constitute the usual source of recruitment for second-degree training. Certain preparatory A.V.T. courses are moreover organised in France for those who have not had the required general or scientific education or who have forgotten over the years certain basic subjects learnt at school.

3. *Application of the A.V.T. method*

Can the general principles of the A.V.T. method be applied to training for occupations of an intellectual nature? The answer is that it can, to a limited extent, with certain adjustments.

a) The « active » nature of the courses, that is, constant participation by the trainees both in theoretical discussions and practical laboratory research, can obviously be retained without difficulty.

b) The principle of teaching theoretical content only during practical work must give way to the scope and complexity of the theoretical knowledge to be acquired.

c) Despite appearances to the contrary, working from the concrete to the abstract can be applied to most exercises of the programme.

d) For certain courses the « single-instructor » principle must be given up, especially in electronics, owing to the specialisation required of instructors. To avoid returning to the traditional system of teaching, however, the day-to-day operation of the courses must be co-ordinated by one of the instructors.

e) The whole syllabus is still based on job practice and on the work required in exercising the actual occupation. It does not include material unrelated to the main subject dealt with each day¹.

4. *Details as to the purpose of second-degree training*

Under A.V.T. may be included such training usually consisting of full-time courses, as to provide the trainee with an opportunity for promotion or orientation towards a new occupation.

Advanced training, further training, and instruction concerning new techniques are provided by all kinds of institutions and are not within the scope of A.V.T., despite their unquestioned utility. The main task of accelerated adult vocational training is to keep in step with the employment market. It may be presumed to play such a part by training for advancement, even if shortages are thus created at the lower level of recruitment. But further training in the job itself must be left to the technical schools (as in Belgium) or to the firm (as in United Kingdom), according to the tradition prevailing in each country. A.V.T. activities in this connection can only be justified (as in France) by the scarcity of other institutional facilities.

II. REHABILITATION OF HANDICAPPED WORKERS

The vocational rehabilitation of handicapped workers or the readaptation of disabled workers would require separate discussion. We shall only indicate a few special problems of rehabilitation of disabled workers in the context of A.V.T.

1. Accelerated vocational training is only one optional link in the general process of economic rehabilitation of the handicapped.

2. It serves but a very small percentage of handicapped workers, whose rehabilitation takes place directly or through specialised employment services. Even in the United Kingdom, which has played a pioneering role in this connection, especially by creating I.R.U. sections (Industrial Rehabilitation Units) few disabled workers, after being subjected to tests and observation during many weeks, subsequently are directed to accelerated training sections.

1. For example, a programme training foremen or superintendents in the building industry chiefly consists of a series of tasks of increasing complexity. The teaching of theoretical concepts relating to the job will be progressively introduced during the study, preparation, execution and criticism of such tasks (reading of plans, mathematical operations, work organisation, security, regulations, etc.).

3. Yet the conditions of full employment which have prevailed in most Western countries for many years should have enabled more disabled workers to have been redeployed through A.V.T. In all these countries, many remain idle — or are employed under conditions which ill befit their physical capacity — while their total numbers do not necessarily appear in the unemployment insurance or disability pension statistics.

4. The limited scope of A.V.T. activities may be explained chiefly by the following reasons :

- a) As already mentioned, A.V.T. has chiefly concentrated on teaching the major trades in the building and metalworking industries, most of which require unimpaired physical powers.
- b) As long as management offers no serious guarantees of employment (whether or not under a law requiring the compulsory employment of a given percentage of handicapped workers) the A.V.T. authorities fear that the expense of training disabled persons will be incurred to no purpose.

5. The normal goal should be that handicapped workers accepted for A.V.T. be allowed to train in the same sections and along the same lines as normal workers, not only for psychological reasons, but because later at the factory they will be working at the same sort of job and under the same conditions as normal workers.

In Belgium, under the system of vocational readaptation of unemployed workers, a high percentage of trainees was made up of various types of handicapped persons.

6. The creation of special resident centres should only be considered for seriously handicapped persons whose condition markedly interferes with normal training or whose health still necessitates regular care. These centres should generally work with medical or functional rehabilitation institutions.

7. In the United Kingdom there are four special A.V.T. centres for the handicapped, besides the 14 government centres (G.T.C.), where many partially disabled workers are admitted.

In France such centres are generally run by private institutions or social security units, which are entitled to official approval and can accordingly be subsidised in the same conditions as other private centres¹.

8. Training in the United Kingdom in an I.R.U. section, even when lasting twelve weeks, has nothing in common with A.V.T.

1. See chapter VI, section III, b.

training, and moreover only constitutes preparation for a limited number of disabled persons showing capacity for such an accelerated training course. Trainees in the I.R.U. are under the observation of a staff consisting of a doctor, welfare officer, psychotechnician, placement specialist and the instructor responsible for the trainee. The purpose of co-ordination meetings is to determine the disabled person's re-employability, allowing for all the factors noted by each specialist, and to take appropriate measures, which usually involve action by the employment services.

9. Tuberculosis patients whose condition has become stabilised but who still need continued care are the prime justification for special centres. There is an increasing tendency to begin the process of vocational rehabilitation in workshops attached to the sanatorium, and to admit trainees before they are completely cured, so as to effect a transition (both medical and psychological) between the stage of almost complete immobilisation during treatment and the resumption of normal occupational activities.

10. In the special vocational rehabilitation centres for handicapped workers, the method of individual instruction is necessary, especially when the A.V.T. centre works in conjunction with a medical institution which releases candidates for training according to the stage of recovery and takes them back in case of relapse. In France, however, the special centres for physically incapacitated workers have adopted the group method, as in all A.V.T. sections. The main disadvantage of this is that chronically ill or disabled persons who are frequently absent lose contact with the course as it unfolds.

III. TYPES OF A.V.T. TRAINING

We have so far based our analysis of the problems of A.V.T. on the programme as applied in a centre directly run by a main authority, that is, in practice a department of the Ministry of Labour with or without relative autonomy. Other types of accelerated vocational training have also been established, with the approval or under the control of the national A.V.T. authority. These consist of individual training arrangements, approved centres run by private institutions, and especially of centres within the firm.

a) *Individual training contracts*

This is a contract between three parties : a firm¹, a wor-

1. Sometimes a school, but this is exceptional in the case of adult workers.

ker, and the A.V.T. authority. The first party promises to teach the second the component parts of a skilled trade, and the A.V.T. authority refunds part of the wage paid to the worker by the undertaking.

Such a contract can mainly be supported for the reasons advanced in favour of articles of apprenticeship for young people ; neither the centres nor the schools can create courses for all trades in every region, especially when needs are small in number.

Such individual contracts in the four countries studied are usually subject to restrictive clauses (in Belgium the number of contracts for unemployed workers is limited to a percentage of the firm's staff), conditions attaching to the syllabus (United Kingdom) or to maximum amounts of financial aid allowed (the Netherlands). Alternatively, contracts may be limited to certain priority groups (repatriates from Algeria and handicapped persons in France). Little recourse has been had to this method and no more than a few hundred such contracts are signed annually in each country. It is strongly opposed by all accelerated training experts on the following grounds :

1. Firms are not organised to give individual instruction in a skilled trade. In actual practice, most trainees will act as assistants and will not progress beyond the status of a semi-skilled worker.

2. It would be unrealistic to expect the A.V.T. authority to be technically capable of supervising the training given under individual contracts in a large number of trades throughout the country.

The clause which states that the worker is to learn a skilled trade within a specified time is purely one of form.

3. The method may give rise to misapprehension and discredit A.V.T., since it enters into a contract whose clauses — even when vaguely defined — are known to be disregarded in most cases.

4. Since no proper apprenticeship is organised, the firm actually obtains cheap labour whose wages are partially paid by the government.

When the individual training contracts are small in number, are subject to restrictive conditions and a certain amount of supervision, possible abuses should not however be given undue stress.

They are sometimes concluded — as in Belgium — for disabled workers whom it is difficult to place at official adult wage scales. Even in this case, it would be better to include such a policy under employment aids rather than under accelerated

vocational training, with which it has hardly anything in common.

b) *Approved and subsidised centres*

Not all A.V.T. centres have been created by the Ministry of Labour in application of a law, and often a central authority, by granting subsidies and co-ordinating the efforts of local authorities or trade associations, has approved and encouraged development on a regional basis. This has occurred in Italy, where numerous municipalities have organised courses for the employment or redeployment of workers ; and in France, where various craftsmen's guilds, especially in the building trades, have followed true-honoured tradition by creating vocational courses for adults.

The historical development of courses which, because of the mission they set out to accomplish, may be considered as forerunners of A.V.T., does not alone explain the existence of approved, subsidised centres in varying number side by side with the centres created by the A.V.T. authority in several countries.

Where A.V.T. is found on a large scale — as in France — the task of the managing authority is further complicated by the need to deal simultaneously with economic, legal, administrative and financial questions in addition to staff and co-ordination problems. Technical and teaching problems, which have a direct, decisive influence on the efficiency of A.V.T., are apt to be neglected in favour of tasks whose day-to-day solution appears more pressing.

One remedy may of course consist in decentralising the administrative responsibilities of the managing authority, but another solution is to promote the creation of subsidised centres managed by other organisations.

The formula of a centre whose administration is independent from the central A.V.T. authority may be required in the case of re-education of disabled persons involving action similar to accelerated training, which can best be handled by a specialised body.

Requirement of a trade itself may also make it preferable to adopt the solution of an approved centre; certain trade associations will have greater facilities than the Minister of Labour in running centres dealing with agriculture, forestry, mining, shipbuilding, metallurgy, etc.¹

Such efforts have mostly been made in France; in addition to its own centres, the A.N.I.F.R.M.O. operates through a hun-

1. Centres teaching trades in such sectors usually operate in the relevant undertaking (see section IV of present chapter), but they can also be run by a trade organisation.

dred or so approved centres, created and managed by social security bodies, private associations, trade unions and industrial federations.

In the United Kingdom, the special vocational training centres for handicapped persons (where certain disabled categories are sent after their period of rehabilitation in the I.R.U.) are run by private or public institutions. Belgium has a centre in a sanatorium, another in a forest area, and several in the mining industry. In the latter case, it is not the mining area centre itself but a joint regional association which is responsible for management.

Private centres will be subsidised provided they adopt a syllabus which conforms to general A.V.T. standards, accept the supervision of a central managing authority, and send their instructors for teacher training (France).

The subsidy covers all or part of the allowances granted to trainees and the instructors' salaries, but not operating expenses, which are assumed by the body managing the centre.

IV. ACCELERATED TRAINING IN FIRMS

The traditional and quasi-philosophical argument opposing the partisans of vocational training in schools under government sponsorship and the advocates of vocational training within the firm and largely under its own responsibility, has only partially subsided following the changes which have taken place in many countries during the last few years. It is mainly young people, however, that industry has preferred to train within the firm, especially in the United Kingdom, the Federal Republic of Germany, Austria and Switzerland.

Little had been achieved for the benefit of adults, until the limited efforts lately made to bridge this gap through the organisation of a few courses outside the firm, side by side with A.V.T. government programmes.

Besides a recommendation of the International Labour Conference (1962) invites firms and groups of employers to draw up systematic plans for training their staff.

a) *General*

The training of adult workers within the firm can be envisaged from different angles :

1. The standard of training.
2. The financing of training.
3. Comparison with government-organised A.V.T.
4. Syllabuses and particularly the conditions for integrating the training courses with production.

b) *Standard of training*

In many countries firms have long since devised systematic programmes for training adult staff¹.

These firms have recognised the profitability of such action and the consequent improvement in the quality of production, work organisation and productivity, the lessened accident rate and the greater stability of staff so trained. The capital expended and operating costs are rapidly recovered. Preparation of the programmes has been entrusted either to a specialised department, to a research section of the employers' association, or to organisation and methods experts.

A few typical examples of achievements in this field may be mentioned :

1. In United Kingdom, the specialised services of the British Iron and Steel, and Wool Federations ;

2. In the Netherlands, training organized in different firms by the Berenschot Organisation which then extended its activities into other countries ;

3. In France the interfirm centre of the Troyes hosiery industry ;

4. In Belgium, the training of miners under the auspices of the Fedechar national trade organisation, or in application of the T.W.I. method.

5. In the Federal Republic of Germany, centres created by the Welding Technology Organisation².

Almost always, firms have undertaken to train adult workers when the reserve supply of younger people has begun to fail ; but on the whole they have only been trained for limited, uni-skilled jobs at the semi-skilled level³. Only a few firms have created more comprehensive courses for adults extending over several months and fully qualifying the worker for a trade. Firms claim that this policy is justified by the need for a versatile interchangeable group of workers that can be shifted among different jobs when workers are absent or in the event of production changes in various departments.

1. The O.E.C.D. in 1955-56 organized a survey of training programmes in a number of firms ; the national reports, prepared as monographs at the time, were published separately for each country.

2. The reader will find an analysis of numerous other achievements in such periodicals as the BACIE Journal (United Kingdom) or « Notre Formation » (France).

3. It should be remembered that this study covers full-time courses for adults aimed at giving them a skill or a qualification which enables them to fill a new job. It does not cover the numerous courses, seminars, or discussion groups, whether held in firms or outside them, aimed at the development of supervisory staff.

c) *Financing*

Increased comprehensive adult training in courses systematically organized within the firm poses a problem of financing. An altogether different approach is adopted compared with the young apprentices, who are under contract to the firm and receive instruction in trainee workshops or on the production line. The low pay given to young people as compared with that demanded by adult workers enables the firm to write off both its training expenses and the difference in productivity. Apart from the few exceptions mentioned, a firm will only undertake adult training over a short period, and one which accordingly falls short of the goal set by the A.V.T. centres. In order to increase the stability of its staff, it is of course in the firm's interest to supply a minimum amount of training, (which diminishes the particularly rapid turnover of unskilled labour) of a highly specialised kind, based on a knowledge of the firm's individual type of production and not of such a polyvalent kind to enable the worker to find a job easily elsewhere.

A firm will only consent to give more extensive training when it receives financial assistance from some other body.

d) *Conditions for organising A.V.T. centres within the firm*

The A.V.T. authority for its part may well prefer that certain trades be taught within the firm rather than in a centre under its direct responsibility.

1. *Points in favour of a centre within the firm*

a) *Technical reasons*

Training in certain trades requires the use of complex and expensive equipment which the A.V.T. managing authority cannot afford to buy, so that the only equipment available exist within the firm. Thus for rolling-mill operators, machine operators in the chemical industry¹, fitters in ship-yards and power-loom adjusters, the A.V.T. centre could only with difficulty obtain the necessary training equipment, outside the undertaking, even though a period at the beginning and end of instruction may be envisaged in outside centres, to ensure a polyvalent training.

b) *Organisational reasons*

Preparation, supply and daily management in a great many centres means that the administrative organisation becomes

1. See however chapter VII, § II, 4.

increasingly complex and demanding. No doubt the example of the Ministry of Education, which runs a greater number of schools, may be cited. There is, however, the danger of a loss of contact between the men who give the orders and those who carry them out, with possible harmful consequences to training, which demands swift adjustment to new, constantly changing needs.

Centres within the firm, on the other hand, require general supervision rather than day-to-day management, and thus free the managing authority from considerable administrative work.

c) *Financial reasons*

In A.V.T. training equipment and raw materials cost a great deal¹; most of these are discarded after use. When the programme provides for the processing of costly materials into commodities, the sale of the latter raises a delicate problem for a government department, whereas in a company centre the programme normally provides for the production of goods that can be turned to account by the firm itself.

2. *Sensitive aspects of centres within the firm*

If relatively few centres are set up within industry, this is due to various delicate problems which can only be overcome under a certain set of favourable conditions.

a) *Establishment of syllabus*

Financial assistance will only be granted to such a centre (in France and Belgium) if the standard of training under the syllabus adopted is as high as in A.V.T. courses (such as the OP I level in France).

This almost invariably requires that training must either partially or completely take place under other than normal working conditions in the firm, usually in a separate workshop. Observance of this condition seriously upsets the internal organisation of the firm.

b) *Adjustment of financing methods*

As soon as a government department contributes to the wage of a not fully productive worker, whose rate of output in the various stages of his training cannot be accurately ascertained, rival firms are likely to object. To forestall these objections, the approval of the trade organisation in the sector must first be sought.

1. See section VI of the present chapter and annex IV.

c) *Difficulties of adequate supervision*

It is difficult to ensure that the established programme is properly applied, since delegates from the A.V.T. managing authority cannot be present all the time. Pressure from the various parties concerned may well lead to incidents and misunderstandings.

If firms deviate from the programme, the standard of training will inevitably be lowered and trainees will become specialized in one determined job, thus increasing their dependence on the firm.

*
**

All such contingencies are largely reduced in the case of reputable firms whose policy is one of long-term training and which consider the temporary financial burden of the centre to be a minor factor. In this case, government financial assistance is justified to the extent that the firm provides the worker with more training than is necessary for its own purposes. If no public funds are awarded in support of such training, the most progressive firms in this respect will be penalised in relation to their competitors, who are content to lure away the labour already trained. Such situations in the training sector for young people have led France to adopt an apprenticeship levy, prorated according to the amount of staff employed, and which can be refunded to firms who have organised training courses for their workers. In the United Kingdom a trend is growing in industry itself to distribute evenly the cost of training young people and possibly of adults among different firms.

Occasionally the refunding of training expenses takes place under the auspices of trade organisations, whether or not in obedience to existing legislation.

e) *Achievements, methods of financing and supervision*

Legislation in the United Kingdom and the Netherlands has made no provision for subsidised A.V.T. centres within the firm. In France and Belgium, firms creating their own centre which have signed an agreement with the A.V.T. authority can recover part or all of the allowances paid to trainees and of the instructors' salaries. No financial assistance is granted for general operating expenses, such as depreciation of premises and equipment, use of raw materials and power, etc.

As for all private and approved centres, financial assistance can only be given after approval of the programme by the A.V.T. authority, and the firm must agree to A.V.T. supervision ; moreover, instructors in French firms must first have received preparation at the National Vocational Training Institute (Institut in rue Dareau in Paris).

In planning the extension of A.V.T. in France during 1964, new rules are to be formulated to ensure that centres in the firm shall be organized along the lines of those directly under the A.N.I.F.R.M.O.

f) *« Privileged » firms*

In France and Belgium, various firms are entitled to subsidies for training their adult staff without meeting the strict requirements for A.V.T. centres within the firm. This is part of an economic plan to promote, by economic, financial or tax incentives, the establishment of new factories (especially in agricultural regions undergoing consolidation), or the retraining of production departments owing to changing techniques and markets, or in order to absorb pockets of unemployment in depressed or under-industrialised areas.

The training of workers employed or relocated in these new factories can take place « on the job », in the production line, following a programme independently established by the firm itself. The syllabus, which has few points in common with A.V.T. apart from the fact that adults are trained, is nevertheless an A.V.T. concern in both countries, since it proposes to assume training expenses in proportion to the standard of training provided.

The A.V.T. authority in France finally plans to help firms who so request in drawing up their training programmes, whether or not these are subsidised, or by briefing the firm's instructors in the workshop on training methods.

g) *Preparation of a training programme within firms*

When training is subsidised, the firm draws up or modifies its own syllabus with the advice or assistance of the A.V.T. authority. In France, the instructor trained at the Institut in rue Dareau usually helps to work out a syllabus whose terms he knows will be acceptable, but as a rule a firm with no specialised service and experienced staff for this kind of work appeals for help to an outside firm of consultants.

An example is the Beerenschot Bureau, which is the best known in this field. It works along the following principles and methods, which in the example below have received particular application in the training of adult workers between semi-skilled and skilled levels :

1. Training is based on the needs of the firm, with a view to later employment in one or more specific jobs. The desire for a team of versatile workers causes training to be carried fairly far and to include theoretical subjects.

2. The bureau selects the instructor(s) from among se-

nior production staff ; after a few weeks' instruction, particularly in job analysis methods, the instructors themselves draw up the programmes, under the supervision of the Bureau's methods engineers.

3. In choosing candidates from among the factory workers, an effort is made to ensure that the group will be as homogeneous as possible.

4. The syllabus is usually divided into two distinct phases.

a) The first phase includes fairly extensive basic training, which is nevertheless geared to the firm's type of production. Trainees are taught to carry out a number of somewhat varied operations corresponding to the combination required for the manufacture of the factory's type of product. (Thus mechanical engineering would include welding, fitting, turning, lathing, and adjustment operations).

During this first period teaching is collective, especially in the theoretical part of the course ; it is sometimes more difficult to link theory to practice, since the trainees prefer real jobs to mere exercises ; the factory makes a selection so as to allow the trainees to perform the simplest manufacturing operations.

b) During the second phase teaching becomes specialized and each student receives individual instruction in the speciality determined at the end of the initial phase. On completing the second phase which takes place in the production line, the trainees must progressively attain the firm's output standard.

5. The single-instructor system is used. During the first phase he gives both theoretical and practical instruction to the trainees in a separate workshop, and in the second phase he continues to supervise the trainees who are scattered in the factory workshops. During this part of training especially, a smooth relationship between the instructor and foremen and co-ordination of their efforts are imperative ; prior action by the management forestalls any conflict which may arise due to the activity of the instructor in various workshops, whose supervisors are responsible for both the quality and quantity of output.

V. PLACEMENT OF TRAINEES

Immediate placement is the natural conclusion of an adult vocational training course, provided it is not regarded as a short term goal to be attained under any conditions. The decisive factor is long-term stability at the skill level which was the target of training.

The placing of trainees in employment should be prepared before the end of the course, if it is to be selective. This is presumably considered to be a job for the employment services,

and according to the organisation as described in each of the four countries, the regional employment services are in fact responsible for finding jobs for those who have been trained. Yet it is unthinkable that the people who have known and critically evaluated the trainees for so many months should not actively share in their placement. Moreover, assessment of the value of training will largely depend on the subsequent failure or success of trainees in their jobs. It so happens that neither one nor the other are solely due to the quality of training ; both the kind of job and the ex-trainee's working environment equally influence his future job. The organisation responsible for training cannot therefore remain indifferent to placement through other services.

a) *Preparation for placement*

1. Although such a solution may appear paradoxical at first sight, the best preparation for trainees' future employment takes place when the centre itself is becoming organised. It is in Great Britain that the conditions for successful placement appear best fulfilled, whenever the agreement of employers' associations can be secured, not only where the needs to be met by the centre are concerned but in regard to the syllabus, the selection of trainees, and the scale of remuneration upon completion of the course.

2. Another method of preparing for selective placement is to record the daily progress of each trainee, provided results are transmitted to the employment services a few weeks before the end of the course and samples of the trainee's work (particularly in the metal trades) are examined by representatives of the firm. These conditions seem to be fulfilled in each country.

3. In dealing with firms likely to employ former trainees, the employment service must rely on a selective approach. The report of each trainee to the employment services must evaluate the quality of the work, output, accuracy, neatness, and the social and psychological attitude of each of the trainees. In discussing students and apprentices, Carrard strongly emphasised¹ that it should be possible to distinguish between « true » and « false » failure, since the latter might be attributed to incompatibility between a man and his working environment, and particularly between the man and his superiors.

4. It frequently happens that a trainee is assigned work through the direct offices of the centre's management, or even

1. Psychologie de l'homme au travail.

by the instructor himself at the request of firms. In our opinion the only disadvantage of this procedure is the possible objection of the employment services, especially when their efficiency is assessed in terms of numbers of placements.

5. In order to gain the confidence of employers and stimulate competition between trainees, a final examination is organised in France with a jury on which employers and workers are represented from outside the A.N.I.F.R.M.O. A certificate is awarded to successful candidates. It is however believed that the practice of delivering a « diploma » or « certificate » should only become generalised when A.V.T. has reached such a high standard of organisation, programmes, and methods as to guarantee equivalent training in all courses of a trade. Otherwise the diploma may well defeat its own purpose, and, as when trotted out in order to justify wage claims, bring discredit on the institution itself. For this reason no such certificate has so far been issued in either the United Kingdom or Belgium.

In the Netherlands where A.V.T. has not yet been accepted for all trades, trainees are advised to sit for the « leerlingstelsel » examination, that is for long-term apprenticeship courses organised for young people.

It is of course more difficult to organise final examinations when instruction is given individually, unless they take place at a fixed date and can only be taken after a certain amount of time spent in the industry¹. The British, who have tried out the system of final examinations, object that a « cramming » process under the direction of the instructor beforehand interferes with the smooth running of the course.

b) *Wages of ex-trainees*

1. In some countries, the wage which must be given to trainees has been and still is a serious obstacle to employment. Although the services of A.V.T. trainees are of an equal or higher standard than that of workers who have learnt their trade on the workshop floor, the yield is much lower and the output of workers who have completed an A.V.T. course amounts to between 2/3 and 3/4 of standard output.

2. Adult workers are however involved, and are guaranteed the minimum wage for skilled workers as determined by collective agreement or by law.

Even if the wage demanded is the minimum amount paid in the worker's new job classification, some firms refuse to guar-

1. As in the Netherlands, where some trainees prefer to take the examination organized by the A.V.T. authority itself rather than the apprenticeship examinations.

antee its payment even if it leads to a sort of economic Malthusianism by refusing to employ additional workers and thus limiting their productive capacity. These difficulties can no doubt be overcome more easily in an expanding economy, when firms more readily accept an initial difference in output, as was the custom before the existence of any kind of accelerated vocational training for adults.

3. To remedy this difficulty, in A.V.T. courses in France and the Netherlands, during the second phase of training, that is usually from the third month, after the completion of the preparatory phase and the first job exercises, trainee operations are marked both according to quality and time. The object is to ensure that at the end of the course the trainee's output will amount to about 70 to 75 per cent of that of an experienced worker.

4. An easy way out and one to be rejected — except perhaps in the case of trainees who are particularly slow — consists in continued training at the centre under an individual contract with the firm, providing for payment of part of the trainee's wage by the A.V.T. authority during a further period. This solution, which is often supported by the employment services since it makes their job easier, has been adopted, although to a largely limited extent, in the Netherlands and Belgium.

5. Attempts should be made to determine the normal wage for trainees in advance, by collective agreements in each sector on a national or regional scale. This presumes that the centres have the confidence of trade unions and firms, that the latter have both approved their programmes, and that the soundness of the training is unquestioned.

In the United Kingdom a number of collective agreements chiefly in the building trades provide as follows :

- a) During the three months following the course, the worker is paid 85 per cent of the normal wage in his new job classification ;
- b) The amount is increased to 90 per cent during the three following months and reaches 100 per cent after the sixth month.

The worker hence bears the difference in wage, but it is considered that such agreements are all the more warranted by the fact that many of the workers trained in the G.T.C.'s are disabled.

c) *Verification of results*

1. To a greater extent than ordinary schools and technical colleges, which provide general training and the means of ap-

plying a certain amount of acquired knowledge, A.V.T., which trains workers directly to qualify them for immediate employment, must be able to ascertain the quality of its courses so as to make any necessary timely corrections. It can do this much more easily than academic and technical institutions, since its scope is smaller and its objectives are more limited and better defined.

2. The fact that ex-trainees are scattered all over the country however makes it difficult to discover what progress they are making in their jobs. Any appropriate survey would appear to require, in addition to questionnaires which only elicit a certain percentage of replies, that an interview be arranged with the ex-trainee or his employer as part of the enquiry.

3. A rudimentary method, but one which gives a general idea of the results of the course, consists in supplying the ex-trainees, several months after the end of the course, either a set of tools (France) or a bonus (Belgium). To obtain this bonus or tool kit the trainee must produce a certificate of employment in the trade he has learnt. The British system is somewhat different in that the tools are lent to the trainee at the end of the course and become his property upon employment in the trade. If the tools are not returned, the worker is presumed to have a steady job. In the Netherlands it is the examination organised for either the apprenticeship diploma or A.V.T. certificate which makes it possible to contact most of the ex-trainees, since this test can only be taken one year after the end of the course.

4. An enquiry based on a detailed questionnaire and supplemented by a personal interview, although requiring a considerable amount of work and capable of being undertaken only periodically, provides the truest picture of the ultimate success or failure of accelerated courses and an opportunity of discovering possible causes and remedies.

This type of survey was once undertaken in Belgium in 1951 as part of the vocational retraining of unemployed workers¹. In 1958-1959 the French C.E.R.P. (Centre d'Etudes et de Recherches Psychotechniques) made another much more comprehensive sample analysis of 1,000 trainees who had completed an A.V.T. course four years before, which appears to allow a largely adequate amount of time for assessing results under sufficiently stabilised occupational conditions².

1. See *Revue du Travail*, Brussels, June-July 1952.

2. See *Revue Française du Travail*, Paris, January-March 1960.

5. Although a comparison between the percentage of successes and failures in the same country can give valuable results, it is always a difficult task to confront such percentages as between countries.

Through the European Social Fund Member States of the E.E.C. must communicate a certain amount of information on percentages of success and failure of A.V.T. since the Fund only reimburses « successful training », which is fairly closely defined. Trainees must have worked at least six months in the trade they have learnt during the twelve months which follow the conclusion of the course.

6. It would however be an extremely delicate task on this or any other basis to undertake a comparison of respective percentages of A.V.T. successes and failures in different countries.

According to the fragmentary information supplied by each of the four countries, the percentage of success in Belgium is somewhat lower (60-70 per cent) than in other countries (80-90 per cent).

If the enquiry takes place four years later (as in France) percentages are appreciably corrected, whereas information obtained at the end of the course and especially the percentages of immediate employment are entirely devoid of significance.

7. A true comparison between countries is distorted by the unrelated basic data, not to mention the different criteria used in the enquiries themselves. The A.V.T. « environment » in each country varies; its organisation facilities differ; and a liberal or restrictive policy of selection inevitably affects the percentage of valid results, just as economic conditions cause firms to be more or less exacting in their requirements when trainees are placed.

VI. IS A.V.T. A « SECOND-RATE » TYPE OF TRAINING ?

Must A.V.T., compared with school and apprenticeship courses, be regarded as an « inferior » brand of vocational training, a cheaper formula imposed by necessity? A.V.T. cannot be graded within the hierarchy ; it is designed for a different social category and its action is based on more immediate industrial needs.

The number of hours spent in training for a job in an accelerated six-months course is about the same as in a two-year school course. Moreover, the attitude and capacity of adults are such that they make better use of training time, especially when it has been so analysed as to be applied according to a rational schedule and when the candidates for each trade have

been selected according to predetermined aptitudes and motivation.

The amount of time spent on job training in an A.V.T. course may strike one as negligible compared with apprenticeship courses, but how much apprenticeship time is actually spent in acquiring new practical knowledge, and how much lost in repeating tedious operations or in tasks that have little in common with learning a craft?

Compared with technical education however, the theoretical and technological knowledge in an A.V.T. course is limited to the strict minimum required for understanding and carrying out job operations in the sequence of exercises. To qualify for future promotion, a worker trained in A.V.T. will have to make up for various gaps and shortcomings, especially in his theoretical knowledge.

In pointing to the absence of any general instruction in A.V.T. courses, people are moreover apt to forget that the subjects taught in a general curriculum must be different for adolescents and adults. A.V.T. has not yet however included in its syllabus any kind of social education which could partially compensate for the lack of general academic instruction. Learning a trade, the additional responsibilities and new satisfactions thus created no doubt themselves procure a large content of human and social training. The teaching of other concepts such as professional ethics, rights and obligations under work contracts, a practical knowledge of social security and company organisation would take little time and suitably round out the strictly technical courses, provided such material were taught at the proper time according to the method used for the central subject, and were relevant to the practical aspects and requirements of the trade¹.

*
**

So long as the time provided determines and limits the content of A.V.T., each day and each hour should be rationally used. This may be achieved in several ways.

1. Varied, short exercises, especially in the initial phase, prevent the boredom, monotony and loss of interest which otherwise rapidly occur and hinder the acquisition of new knowledge.

2. The equipment available in A.V.T. is far more extensive than in ordinary schools. There must be enough machine and

1. For example, a talk on the behaviour of a finisher in the building trade making repairs in an occupied dwelling.

hand tools — both in individual and group instruction — to ensure that the trainee is never idle. A machine should be used only part of the time rather than a trainee be compelled to wait until a colleague has finished with it. Each trainee should be able to work immediately after the demonstration ; which means, for example, that every trainee should have access to a lathe and a welding station.

3. Consumption of raw materials and power is heavy, and the commendable desire to re-use materials may prove more expensive than throwing them away. Every minute costs money and savings should rather be attempted in the length of training, even if this means using large quantities of such materials as cloth, lengths of steel, electrodes or bricks.

4. The desire to save time has sometimes prompted centres not only to prepare practice materials in the shop beforehand — an obviously necessary procedure — but to employ operatives and maintenance men so as to free trainees from jobs which are of no use in learning a skill.

Two operatives at a section teaching bricklaying can thus be assigned the task of pulling down the work, setting out and putting away the material, and preparing the mortar since after the initial phase all such jobs are a repetitious exercise of no value to the trainees.

Although many other examples may be quoted, actual achievements have been few. The psychological barrier is the visible costliness, as opposed to the actual savings thus effected which the financial departments are less disposed to admit.

5. Optimum use of training time implies that the instructor must be able, after introducing and demonstrating each operation, to devote his entire attention to supervising the trainees performance and intervene in time to forestall or correct wrong motions or methods. He must not be made responsible, as appears to be the case in France, for paperwork to be dealt with during instruction hours¹, or owing to a shortage of administrative staff, to keep inventories, draft reports, or receive visitors, as in Belgium, especially in « isolated » sections. If the instructor's responsibility for paperwork is part of the normal routine of the course, such work should be done outside teaching hours, and ultimately be treated as overtime.

6. As already stated, the constant and simultaneous supervision of a group of trainees requires that they be few in

1. Marking sheets are an exception, since they are an essential part of the instructor's job.

number, otherwise there will be a sacrifice of thoroughgoing efficiency to the cause of apparent economy.

*
**

Observance of the above standards entails high costs, and A.V.T. must accordingly be made as efficient as possible. The approximate cost of a few typical courses in each country is listed in the Annex. Expenditure has been broken down as between the trainee allowances, salaries of instructors and auxiliary staff, and the general operating expenses of the centre¹.

1. See annex IV.

Chapter VII

THE OUTLOOK FOR A.V.T.

In Chapter II we defined the objectives of A.V.T. and analysed the many varied needs that it was able to fill in a modern economy. In doing so, we devoted our attention first and foremost to describing the situation as it now is in four countries. However as far back as the introduction we mention the outlook for the future of a method of training of which the importance in merely quantitative terms is still marginal when compared with the other traditional methods of training. One can and one should ask oneself the question whether A.V.T. will be able, as regards its syllabuses and methods, gradually and in a more or less distant future to become a valid substitute for other more traditional ways of attaining proficiency in a trade. In the short run such a belief would be purely illusory, for A.V.T. has only just achieved recognition in a number of countries¹ and in others it is up against « teething troubles », while in others again it is still treated with indifference, scepticism or hostility. In the long run, the development of A.V.T. will continue but we do not think that this will be at the expense of technical education.

However, when it is a matter of *retraining workers*, due to actual or anticipated structural unemployment, it is easier to obtain agreement for A.V.T. training, which is the only possible solution when a shortage or a surplus of manpower occurs in the skilled categories. The building trade provides a typical example in the case of the traditional bricklayer who will have to be retrained in the techniques of modern masonry as practised in large-scale construction : this is happening at the moment in France.

Similarly, when it is a question of the rehabilitation of the disabled, there is no difficulty in securing the agreement of all concerned to A.V.T. courses being organized.

When opposition is shown to A.V.T. courses either as such or insofar as they appear as rivals to the traditional methods, the causes can be ascribed to the following principle factors :

1. And even in France its position is a modest one compared with that enjoyed by the forms of training leading to the C.A.P. (certificat d'aptitude professionnelle) and by apprenticeship under articles.

1. *Doubt that results can be attained in so short a time.* The best way to answer such disbelief is by means of a long-term analysis of the overall results of A.V.T. after completion of training (e.g. the French publications of C.E.R.P.) ; other results covering smaller numbers may be more impressive, such as the success achieved by a group of trainees after completing an A.V.T. course in the Netherlands, at examinations organized by the Institution for Apprenticeship, which are supposed to be only for candidates who have served under articles for many years.

2. Some of the institutions that support A.V.T. fall into *the mistake of thinking that skill at a trade can only be acquired by long training* and not by means of short courses. They use the latter for retraining unemployed unskilled workers, but do not aim at making them more than semi-skilled. This indeed can be the effect of A.V.T. when it is badly organised. But for such limited aims the heavy cost of full-time A.V.T. training is totally unjustified.

3. *Denial of the increased requirements for skilled workers, or rather, belief that they can be met by apprenticeship or the traditional training schools.*

Such an assertion is often met with alongside the argument that automation and mechanisation will entail appreciable and proportionate reduction in the number of skilled workers. We have demonstrated that recent trends proved this assertion false and that forecasts made by Institutes concerned with the economic situation and other planning authorities indicated on the contrary that the need for skilled workers would increase. Doubtless traditional skills will be profoundly modified in their very essence, but such a « revolution » is only one more argument supporting the need for an A.V.T. system¹.

And finally, it is perhaps somewhat vain in this day and age to claim to assess future long-term trends².

4. *Competition with established institutions.* All the various obstacles in the way of the expansion of A.V.T. could however have been overcome at a time when the need for such a formula for acquiring proficiency at a trade is less and less in dispute,

1. In very large production units the number of skilled workers in the production lines has shrunk owing to the work being split up into a large number of operations, but in maintenance departments it has increased. Some enterprises are beginning to put a brake on overspecialisation, to increase the number of « flying » interchangeable workers and to alternate jobs to avoid the stultifying effect of monotonous repetitive tasks. But of course this does not mean that the majority of such newly created jobs will really equate with a trade.

2. See chapter II, c.

and is actually confirmed by numerous international institutions, were it not for the fact that in some countries A.V.T. has been seen as a *competitor and a rival to other systems* deeply rooted in tradition, i.e. *apprenticeship and vocational training schools*. We shall now proceed to examine the criticisms to which these systems are themselves being subjected and the changes they are likely to undergo ; both the criticisms and the changes may have the effect of putting in a new perspective the relationship between apprenticeship and vocational training schools on the one hand and A.V.T. for adults on the other.

I. PRESENT-DAY TRENDS IN APPRENTICESHIP, ESPECIALLY IN THE UNITED KINGDOM

An analysis of the working of the apprenticeship system is beyond the scope of this survey ; nevertheless we do not see how one can understand the essential features of the positions and attitudes adopted by official circles, by employers' associations and by workers' unions regarding A.V.T. in various countries unless it be by reference to an existing system of apprenticeship which it is desired to retain, either in an improved or in a mitigated form. It is in the United Kingdom that one can most readily observe the positions being taken up, the choices becoming open and the tendencies that are developing.

Traditionally, apprenticeship in Britain lasts five years, starting at age 16 and providing at 21 skilled status in one of a series of old-established trades defined by law or by collective agreements. This rigid structure, which today is being subjected to some jolting and to questioning anew, though more in its methods than in its principles, was founded on the following premises :

a) *Arguments and factors in favour of official apprenticeship*

1. The postulate that a trade is learnt, not at school, but in the factory, where alone young people can be placed in an atmosphere of actual production and in conditions of work that are not artificial.
2. The theory that where vocational training is concerned « time » and « repetition » are essential factors in acquiring the knowledge or the motions required by the work, whereas in A.V.T. on completion of one exercise trainees go on to the next.
3. The claim made by enterprises that the vocational training of their staff is their affair and not a matter for the authorities.

4. The parallel claim, made by the trade unions, to supervise entry into articles of apprenticeship and the progress of training within the enterprise itself.

5. The desire (somewhat « corporatist » in character) to restrict the number of such contracts made each year, in order to avoid there coming on to the employment market a number of skilled workers exceeding industry's ability to absorb them, thus giving rise to a risk of unemployment or of pressure on wages.

6. The fact that older workers who have ascended painfully, empirically and by prolonged effort through all the stages of skill at their trade are displeased to see young people reach such skills in a few months and under far more favourable conditions.

b) *Criticism of the official apprenticeship system*

In the United Kingdom at present traditional forms of apprenticeship are nevertheless a target for a series of criticisms which render likely their thorough reform. These objections in fact amount to saying that the rigid, traditional formula no longer meets the conditions of modern production and modern life.

1. What was one of the very foundations of the apprenticeship system is now called in question, namely, the settlement by way of collective agreements of the number of articles of apprenticeship to be entered into in the year. But such restrictions of a « corporative » nature seem out of place in a dynamic economy, in process of expansion and frequently undergoing « transformation ».

2. The length of an apprenticeship spread over five years appears both too long and too inflexible. In actual practice exceptions are being introduced by agreements reached either for a given district or for a given branch of activity.

3. Since accelerated training for adults is still narrowly restricted, the present system results in denying all hope of access to a skilled trade to a worker who for one reason or another was unable or unwilling to be apprenticed at the age of 16.

4. Where firms organise proper apprenticeship training in their workshops, supplemented by theoretical courses given at the place of employment, and grant young apprentices every facility for further training in a technical college¹, they are

1. E.g. by granting one day off per week with pay, which they are in no wise bound to do by law.

inclined to find the formula an expensive one and to regard themselves as at a disadvantage compared with their competitors who, while making no arrangements for systematic apprenticeship themselves, simply « entice » away the skilled workers when they have been trained. Difficulties of this kind lead to suggestions for the institution of an apprenticeship levy, intended to spread the expense of training.

5. Finally — and this criticism goes deeper, like that in point 2 above — there are those who question whether modern enterprises, apart from a few factories where fully equipped apprenticeship workshops have been set up, really provide the most suitable and best equipped medium for the organisation of vocational training.

6. A further consideration is that lack of experience in teaching and psychology on the part of most foremen put in charge of a training of apprentices does not make for ideal conditions for the process of « on the job » training.

c) *Reforms under way*

1. These were foreshadowed in a White Paper laid before Parliament in 1962, in which the Government made known the principles underlying new legislation it proposed introducing. These reforms at least initially are mainly concerned with apprenticeship, which will still remain for some time to come the basic form of vocational training in the United Kingdom at skilled worker level. But the Industrial Training Boards that are to be set up on the basis of industrial sectors will also be required to develop accelerated training for adults.

2. The traditional attitude of the trade unions¹ seems to be undergoing « re-thinking », but at regional delegate level it appears over concerned with the problem of unemployment among skilled workers in the metal and engineering industry in the North and North East. If they were to rush things — which they in no way seem inclined to do — the authorities would run the risk of a boycott of workers trained in G.T.C.'s, both as regards the metal and engineering industry and the building trade, where there is nevertheless an acute shortage of skilled manpower.

3. The setting up of special sections in G.T.C.'s on an experimental basis for the organisation of first year apprenticeship training is a step in the same direction, i.e. towards

1. Though it might be difficult to discern any national trade union policy in this field, covering all occupations.

organised training taking over from an empirical traditional form in industry.

There are also signs of a growing tendency to make enterprises allow their apprentices time off from work to attend technical colleges. Even theoretical courses given by the enterprise, in specially equipped workshops, appear too « one-track », too specialised and consequently of little use in the event of a change of employment.

One can mention other experiments which point in the same direction, particularly the extensive ones carried out by the Builders' Association in the Federal Republic of Germany. Although they are still organised within the framework of apprenticeship, they practically constitute a negation of its chief tradition since the young people are placed for a certain time in « training sites » and taught according to a systematic programme by instructors especially seconded for this work.

4. The above-mentioned reforms in no wise indicate that the United Kingdom has passed through the intervening stages that are necessary to enable A.V.T. to develop normally. Any genuine expansion of the latter is impossible so long as there subsists — as in the Federal Republic of Germany too — a « stronghold » in which the apprenticeship system claims a semi-monopoly of the right to deliver a certificate of proficiency, possession of which alone gives the right to work at a given trade, the only exceptions allowed being those in favour of the disabled and the unemployed requiring rehabilitation.

d) *Difference in the pay of young and adult workers*

As in the United Kingdom and in the other countries, the whole organisation of the apprenticeship system centres round the notion that an apprentice does not become entitled to normal skilled worker rates until he has completed his period of probation (« stage professionnel ») and has attained the age of 21. It remains to be seen whether this traditional foundation to the apprenticeship system can be maintained in the face of movements supporting certain demands (« equal pay for equal work ») and of changes in the psychological make-up of young workers who want to receive normal rates of pay sooner and to shorten the period of apprenticeship training in the factory.

The problem appears in quite a different perspective when vocational training takes place in an educational establishment. But training of skilled workers in schools is also likely to suffer some serious upheavals — which we will examine in the next Section — in the course of the next few years.

II. TRENDS IN VOCATIONAL TRAINING

We have already¹ pointed out that, having been conceived to meet the needs of a different industrial age, technical education was experiencing great difficulty in keeping up with technical developments and could no longer claim to impart a training and direction that were of lifelong value. It became necessary to face realities, and reforms are under consideration or in course of introduction, but are being held back — as in the case of apprenticeship — by the weight of long-established traditions and institutions. Here again, we propose to examine these trends only in relation to the effect they are likely to have on the development of A.V.T.

1. Technical education, even at lower levels, is tending and will tend more and more to *concentrate on general theoretical technical training* at the expense of practical specialisation.

This evolution is inspired by the ceaseless change of the technical process of production as by the revolution in demand, which in turn commands the structural re-organisation of enterprises ; the essential qualification for the worker of the future will remain in his capacity for adaptation rather than in his mastery of a number of operations which progress quickly renders out of date. This enlargement of his general theoretical technical training will be beneficial to the worker in that it will increase his independence of any one particular plant.

The most aware among the employers' organisations encourage this tendency and wish to see the principle extended to all levels of technical education.

Thus Fabrimetal² is against specialisation during the first cycle of technical or vocational studies. This attitude is all the more striking in that it runs counter to a tendency that is still very much alive in private enterprise circles, which induce training schools to increase the number of specialised courses.

In the Netherlands, reforms are in progress which will transfer to industry the responsibility for teaching a trade, the role of the schools being to increase the ability to assimilate knowledge. This reform will doubtless create a certain number of complex problems for those enterprises which are ill-prepared for this new role.

2. The suggestion put forward by Fabrimetal to limit the duration of the basic courses of technical education at the different levels without encumbering them with numerous addition-

1. Chapter II, B.

2. Organisation of employers in the Belgian metalworking industry, which has published the booklet already referred to called «The young people who are needed in industry» («Ces jeunes dont l'industrie a besoin »).

al specialisations might lead to a *shortening of the time spent on education, if one were to ignore the raising of the general school-leaving age to 16*, which will come into force during the next few years in most countries in Western Europe.

It is more likely — as is now the case in several countries — that vocational education will be able to begin before the end of the period of compulsory schooling.

3. We believe also that the learning of specialised trades on all levels and that the *advanced training courses and promotion courses should not immediately follow initial basic education* but be separated from it by a number of years in industry.

This trend does not conflict with the inclination of a young worker who is able to follow technical or vocational training to aim for the highest *level* possible with the result that the lower-grade technical and vocational courses more and more rarely constitute final training.

The worker gets more out of a special skill which is acquired, supplemented or refreshed in his maturity, since he is better prepared to grasp its content and can choose his speciality in the light of his previous vocational training.

With the system at present in force in Belgium — in which too many trainees accumulate one special skill after another — the main body of what has been learnt become rusty for lack of use. From this « rag bag » of accumulated knowledge is it possible even to identify what is supposed to remain from all education i.e. the technique of learning and the capacity for understanding ?

Specialisation and various additional technical skills should therefore be left to a stage coming after basic education. Should they be taught in evening classes or on several months' special leave for full-time study ? Evening classes for adults spread out over several years are increasingly regarded as incompatible with present-day patterns of living. The second method primarily comes up against financial difficulties. But would some compensation and possibly a solution not be provided by entry into productive work at an earlier age ?

It may be mentioned in passing that it is the principle of successive courses with release from the firm that has mainly contributed to the technical achievements of the Soviet Union.

4. If the second method (full-time training) is chosen for the acquisition of additional technical skills, *the A.V.T. system may be enlarged* and no longer limited to the acquisition of lower-grade occupational skills. France, with its second-degree training, has broken new ground and organised A.V.T. courses to prepare workers for a number of intermediate supervisory jobs. The principle and methods may be adapted — with some

difficulty perhaps — to training at many levels. But specialisation or the acquisition of additional technical skills means that the basic theoretical training must have been sufficiently versatile and thorough at all levels, which supposes a first initiation in a school course and not an apprenticeship in a factory¹.

III. VARIOUS PROBLEMS CAUSED BY TRENDS IN VOCATIONAL TRAINING

1. *The substantial «wastage» of trade schools*

Can those who nowadays attend lower-level trade schools assimilate the extra technical theory which is being introduced into elementary vocational education? The most gifted pupils generally continue beyond this stage, which as mentioned above, tends less and less to be their final training. But what about the others? In all countries where the vocational training of workers is mainly or largely provided at school, a considerable «wastage» may be observed which cannot be explained, as in the case of higher traditional education, by a deliberate policy of selection. The relevant statistics speak for themselves, and show that three quarters of those who begin vocational training drop the course, although such elimination cannot be adequately explained by social pressures².

The majority drop out voluntarily, and although the many reasons cannot be analysed here³, we may mention the cause connected with the subject of the present study, which occurs with manifest frequency and may be expressed as follows: «A great many young trainees in the lower trade sections drop out because they cannot assimilate the theory part of the syllabus and feel no interest in it». Compulsory raising of the school-leaving age is powerless before the pupils' actual dislike of part of the instruction.

2. *General and theoretical technical instruction*

By creating a number, however limited, of A4 sections, Belgium deals with this difficulty by lowering the standard and number of general and theoretical subjects in an elementary vocational training curriculum. This easy way out is perhaps acceptable in a transitional period, but it eludes rather than

1. The Fabrimétal recommendation concerning the training of the machine-setters of automated equipment seems fairly typical in this connection; the diversity of such training would justify its transfer to the schools, where practice in the setting, dismantling and reassembly of the machinery would be accompanied by (elementary) training in the principles of gear transmission, hydraulic engineering and electronics. This training could be acquired by adults in an A.V.T. course.

2. As by the desire or obligation to work for pecuniary reasons.

3. This might be made the subject of an interesting case study by choosing a sufficiently representative social cross-section of an area.

faces the basic difficulty and threatens dire consequences for the future.

The main problem has not been satisfactorily solved in any country where at least part of vocational training takes place at school. The problem may be defined as follows : « Improved standards of living and advanced ideas today make it possible for an ever larger number of children to go to school. But a heavy proportion of those who go in for vocational training give up during the course or are compelled to drop out for reasons connected with the type of instruction given. How is this relentless selection to be reconciled with the increasingly urgent shortage of skilled technicians at all levels ? »

In spite of the mixing of social classes over the last few decades (relatively limited, however), lower-level vocational training is still mainly followed by the sons and daughters of workers, while general education is the direction taken by children from other classes or those who try to « escape » from the family environment. The methods of general education (whether or not based on Latin), just as those of vocational training are however still imbued with the spirit of the last century, when access to culture — and to higher technical education — was the prerogative of a certain « élite ». This class had been trained from childhood and in the family environment to exercise its verbal memory and to reason in the abstract by induction or deduction, independently of any concrete aids. When applied in another student environment unfamiliar with daily discussion by logical reasoning processes but where manual dexterity and the practical solution of day-to-day problems are more important, the traditional methods of teaching the mother language, geometry or history are apt to be found unappealing and the pupil relatively unreceptive.

IV. CONCLUSIONS : PROSPECTS AND DESIRABLE REFORMS

From among the developments which are taking place and the trends which are evolving under the pressure of new needs, is it possible to identify a certain number of reforms which it would seem desirable to introduce and strengthen ? This would apply not only to A.V.T. — which is and rightly should be only one element in an overall system — but to vocational training in general, particularly to the lower and middle levels.

1. Traditional apprenticeship under contracts of long duration, even when completed and improved by supplementary courses at school¹, seems to us to be a system designed to dimin-

1. An invariably curious argument of those who advocate apprenticeship is their proposal of supplementary training which is the very antithesis of apprenticeship itself.

ish or even to disappear sooner or later. The training given remains narrowly based on a particular type of production, and makes the retraining of adults difficult. Young workers no longer accept the bondage imposed by an apprenticeship spreading over several years. Finally, trade-union claims will end by reducing or eliminating the gap between the pay for adolescents and adults, and then the apprenticeship indenture will have had its day.

However, resistance will nevertheless be long, mainly in countries where apprenticeship is based on ancient and deep-rooted tradition, as in the Federal Republic of Germany, England and Switzerland. The influence of adult generations who have been indentured as apprentices helps to maintain the institution.

Even in countries where vocational training relies more on the school than the firm, apprenticeship will retain a certain hold because schools cannot carry the full burden, if only for financial reasons. It is in Sweden that apprenticeship seems to be disappearing fastest.

2. *The period of each vocational training course in schools should become concentrated, with specialisation being discarded in favour of basic general theory.*

Except for those who continue their studies at a higher level, entry into industrial life could thus be speeded up, if one did not have to take into account the opposite tendency resulting from the extension of compulsory schooling.

Even at higher level, entry into active life at an increasingly later age seems inadvisable, both for educational reasons (successive assimilation of too many unrelated subjects) and for social reasons (too long financial dependence on the family).

3. How is this shortening of training to be reconciled with the ever-growing need to acquire more complete and varied technical knowledge? Through attendance at *additional specialisation courses* when job experience has already been obtained.

4. *Adaptation of the methods which underlie A.V.T.* It is no illusion to think that A.V.T. methods — once they have been sufficiently perfected and applied to the teaching of technical theory as well as to general subjects¹ — will be able to attract the young student in technical education to courses which can on no account be left out without leading to the setting up

1. We are perfectly well aware of the enormous amount of work required to adapt the traditional text books in use. A few isolated attempts have been made, such as the Decroly classes in Belgian primary education, and the part-time apprenticeship centres in the textiles industry in the North of France.

within a country of two new rigid classes separated in this case by the opportunity to attain a cultured life.

Except at the higher level where the transposition would be more difficult, the teaching methods applied by A.V.T. and thought out for adults could therefore with the necessary adaptations, make easier the assimilation both of the subject matter of basic education and of subsequent technical courses.

5. Finally, the often repeated assertion that vocational training constitutes a whole can have little scope nor be effective if its administration in nearly all countries remains split up between many separate authorities acting along different principles, with divergent objectives and subject to various Ministries. Vocational training in most Western European countries is under the simultaneous responsibility of the Ministries of Education, Labour, Industry, Commerce, Agriculture or the Middle Classes.

A grouping of all the various forms of training under a single central body would re-establish the necessary coordination and would allow a re-assessment of the problems in order to fit a changing world¹.

*
**

Our hope in concluding this study is that the prospects outlined for the future of accelerated vocational training, together with the opinions expressed in regard to its various problems, will stimulate such discussion that the method can make headway in countries where it has not yet been accepted, and thus help provide adult workers with an opportunity for rational vocational training which has so far been denied them in a system of education primarily designed for young people.

1. In doing so, the new and tighter compartments should of course be avoided, sealing off vocational training from general education, which would run counter to any progress as well as to the arguments here presented. Interpenetration must be ensured, whether under a single Minister or a co-ordinating Minister.

ANNEXES

The foregoing study has established a fairly far-reaching comparison between the systems, syllabuses and the methods of A.V.T. in four industrialised countries of Western Europe.

It also analysed the need which A.V.T. is called upon to meet in those countries, and the trends and tendencies which can be discerned in the possible or probable development of vocational training in general.

The purpose of the following annex nr. I is only to provide certain brief indications concerning some of the aspects presented by vocational training in general and A.V.T. in particular in countries in process of development.

These few observations may perhaps provide a starting point for a deeper study of the needs which exist for A.V.T. in these latter countries, of the conditions under which it should be set up and the direction it should follow.

The interventions of several delegates from these countries at the meeting of September 1964 of the Manpower and Social Affairs Committee showed that such an analysis would be worthwhile.

Annex I

INTERNATIONAL A.V.T. ACTION

I. CO-OPERATION BETWEEN INDUSTRIALISED COUNTRIES

International co-operation between Western European countries, whether or not now in possession of an effective A.V.T. organisation, is still relatively limited. A possible exception is France, where the A.N.I.F.R.M.O. has helped a number of European countries (Italy, Spain, Portugal and Belgium) to set up or improve their A.V.T. system, either directly through bilateral assistance agreements or indirectly through international organizations (such as the I.L.O. and to a lesser extent the O.E.C.D.). Relations at Benelux or Common Market levels are practically non-existent or purely informative, apart from the European Social Fund, which is a financial clearing-house and takes no action in the field of technical co-operation.

A few international seminars have been organised during the last ten years and brief information missions have been exchanged between several countries.

In such a new sector as A.V.T., broadened international co-operation between industrialised countries seems more capable of providing concrete results than meetings between experts on such traditional subjects as vocational training or apprenticeship, in which the national delegates are heirs to long-established, rigid institutional patterns, whereas in each country A.V.T. has much greater freedom of movement in introducing new concepts, reforms or improvements.

International co-operation might be developed at two different levels.

1. Firstly, the aim would be to convince national authorities, trade associations, or union leaders of the potential interest of A.V.T. achievements.

Delegates from the many countries which have only organized accelerated courses for adults to an extent usually limited to the redeployment of unemployed workers would be able to examine the results that other aspects can provide, particularly from the point of view of skill improvement.

2. Secondly, meeting of expert teachers of technical subjects in the respective occupations would be organised in order to stimulate exchanges of teaching methods successfully tried out in the various countries.

In accelerated technical education for adults, which is dependent for success on the capacity for assimilating theoretical ideas supported by concrete job experience, the demonstration and teaching methods used are of capital importance. Why need any parallel research on the same problems be carried out if everyone has access to the methods used by the others? But for this stage of international information to be reached it is necessary that the methods used in each country be compiled.

II. GENERAL FEATURES OF VOCATIONAL TRAINING IN MANY UNDER-INDUSTRIALISED COUNTRIES¹

a) *Present technical staff in industry*

1. The greater part of the populations of the « developing » countries still « rub along » on the product of an agriculture which is technically not highly developed. Repeating the great migratory movements in the industrialised countries of Western Europe during the XIXth century, part of this underemployed population flocks to the towns in the hope of finding work in some developing industry and of receiving the benefit of as yet rudimentary social legislation.

2. Industrial growth depends partly on foreign top and intermediate executive staff and partly on senior national staff whose technical standard is often comparable with that of similar staff in the industrialised countries.

3. As skilled staff is wanting at the lower level, tasks are carried out by a surfeit of semi-skilled workers, who give a low return and are poorly paid.

4. The quantitative and qualitative shortage of intermediate supervisory grades, which is proportionally much more acute than in the industrialised countries, further lowers productivity per person in employment.

b) *The apprenticeship and vocational training position*

1. Empirical forms of on-the-job training under inadequate numbers of junior supervisory grades or under largely untrain-

1. This section may seem to be outside the scope of a comparative study of A.V.T. in a number of Western European countries; the present necessarily short account describes general lines, and consequently is unable to reflect the exact position in a given country. Its aim is to draw up a table of the various data on which A.V.T. can be based in underindustrialised countries, and of its specific objectives in such countries.

ed staff can only produce semi-skilled workers ; at a higher level, the time needed for acquiring adequate occupational skill is incompatible with the requirements of rapid economic development.

2. There are too few trade schools, even considering the limited requirements of existing industry, financial consideration militate against any large-scale development in the near future.

3. The shortage of trade schools is aggravated by psychological and social factors, which deprive production of some of the few technicians and skilled workers trained in such schools.

In particular :

- a) The smallness of intermediate and lower middle classes or of the enlightened working class limits the normal recruiting ground for students for vocational and technical schools. At a higher level, the sons of upper class families are the constant source of supply.
- b) Those who again access to the few trade schools hope to escape from the labourer class and to attain craftsman or supervisory status or obtain office and administrative jobs. The trade school hence is only incidentally the final source of training for skilled workers.
- c) The unbalanced distribution of students between sections in the trade schools is more pronounced than in Europe. Those who manage to gain admittance to a trade school choose such « dignified » subjects as mechanical engineering or electricity. This pattern, which is not merely confined to the underindustrialised countries, has the effect in the latter of preventing the qualitative level of manpower from being raised in certain branches, as in the building industry.
- d) The existing trade schools have often been established on European lines without adequate adaptation to local conditions. The level of theoretical and general instruction continues to be even less accessible than in Europe to a number of students insufficiently prepared by general primary school standards.
- e) The quality of « civil service » teachers or apprenticeship instructors leaves much to be desired so long as industry can offer the best of them higher pay than they receive in government employment.

c) *Role of the A.V.T. in the « developing » countries*

1. Even if the public authorities were to grant substantial credits for the development of the trade schools, which they are able to do in some countries, industrialisation and hence requi-

rements for trained personnel would normally develop more rapidly than the schools. No miracles occur in the technical field, and trade school development can be slow and gradual, one reason being that instructors must be trained and courses extending over several years be organised, but above all because the efficiency of the trade schools depends on first raising the standard of general primary education.

2. In these countries, A.V.T. can more directly meet the requirements of an expanding industry for the following three reasons :

- a) Less time is needed to prepare an A.V.T. centre than to build a new school, which requires heavier organisational and administrative work, and involves greater difficulties in the recruitment of staff and the training of instructors.
- b) The general practical method is better adapted to the trainees' level of receptiveness than traditional educational methods ;
- c) A.V.T. is the only way of providing a minimum amount of occupational and technical training to a generation comprising both students now leaving primary school, who will be too old for admission to the new schools, and those who have already or are about to become adults.

d) *Limitations of AVT in the underindustrialized countries*

1. A.V.T. is by no means *the* solution to all the vocational training problems of a country undergoing industrialisation. It helps to train skilled workers quickly and cannot in the initial stage tackle second-degree accelerated training : that of technicians. Furthermore, semi-skilled workers must at the same time be trained for jobs in industry.

2. The development of A.V.T. centres must go hand in hand with increased employment opportunities, the pay for skilled workers must be sufficiently attractive to prevent trainees from « defecting » after the fashion of graduates from the trade schools. The institution will be compromised for many years if, through lack of planning or accurate forecasting, the trainees are out of a job or inadequately paid.

3. The present study has concentrated on the requirements of industry, owing to the decreasing proportional position in Western Europe of agriculture, which « exports » surplus manpower. Training in farm and rural trades will however take on far greater importance in the underindustrialized countries,

where A.V.T. could teach both village crafts and up-to-date farm machinery operation.

4. Both in agriculture and industry A.V.T. will generally be more versatile in the new countries than in the industrialised countries. In the former the mechanic and construction-worker are still called upon to perform a wider variety of tasks than in Europe and largely answer our own definition of a « jack-of-all-trades ». The technical content of each trade is of course more limited and the quality of performance often leaves much to be desired. Should greater trade specialisation be required later on, a transitional stage will be necessary.

5. A.V.T. curricula and methods have been devised for adults. The question is whether they can be adapted to young people, as requested at the 1961 International Labour Conference by delegates from many developing countries. In spite of certain tendencies which also prevail in industrialised countries¹, we have underlined the danger of extending A.V.T. to the vocational training of adolescents and setting up a somewhat « unfair » competition with regular vocational education. The danger of competition is avoided when the number of vocational schools is manifestly insufficient, even in the context of the limited requirements of an industry as yet largely undeveloped. The objection as to methods remains valid, but these must in any case be adapted to the learning capacity of young would-be workers in such countries.

6. The main risk would consist in « institutionalising » accelerated training for young people, when it merely has the value of a stopgap during a period of transition. This would paralyse the development of vocational education, for the sake of a seemingly more economical, more immediate formula providing quicker returns.

e) *Arrangements and precautions to be observed when introducing A.V.T. into countries of low industrial development*

1. Generally speaking, at the risk of losing many years in finding its feet, A.V.T. can only begin operations under a bilateral assistance agreement or an agreement concluded with

1. We may dismiss the excuse made by some employers whose short-sighted viewpoint reflects immediate concerns and who claim « that a worker doesn't have to know history to be able to drive a nail » in favour of another, more serious argument, which may be put as follows: « For certain trades it is pointless to provide special training sections because young workers are no longer interested in lengthy instruction in such trades (as structural work in building). There is no longer any turnover, and those who sign on at 15 or 17 years of age on a building site or in a factory will acquire no proficiency unless they have access to A.V.T. »

a specialised international organisation. Assistance on the spot by an international team has proved more useful than sending trainees to countries with wide experience. Upon returning to their country of origin, such trainees discover that they are powerless to introduce reforms or incapable of making the required adjustments.

2. Nor does the international expert escape the dangers of transposition unless techniques, syllabuses and methods are adequately adapted to the psychological conditions of the country, its economic possibilities, and the educational level of the trainees.

Many missions have ended in failure, though not through lack of technical and teaching ability on the part of the delegates engaged for the purpose.

3. Once the preliminary survey has been completed and assistance obtained, action should normally begin with the installation of the training centre for A.V.T. instructors. It is this body which will gradually organise technical supervision, prepare the textbooks, and issue directives for selection of trainees and the organisation of centres.

4. In view of the technical and general recruitment standards available for future A.V.T. instructors, the teacher training course is likely to be patterned after the Italian system (22 weeks) rather than the French (6 weeks). The future instructors will in fact probably have to be given additional vocational training.

5. It is also possible that the majority of applicants for training will be unable to follow an A.V.T. course, even if the syllabus is simplified and adapted to local conditions, without having attended a preliminary course similar to those organised in France for « backward » applicants, and combining pre-training with general subjects (language and arithmetic).

It will not always be possible, however, to base the length of training courses solely on the initial level or the objective to be attained, and it will be subject to financial considerations.

Annex II

TABLE A. NUMBER OF PERSONS WHO HAVE RECEIVED A.V.T. GROUP TRAINING IN 1963¹

		BELGIUM	FRANCE	NETHERLANDS	UNITED KINGDOM
1st degree	Building	2,380	18,234	715	325 ²
	Metalworking	803	7,601	1,092	1,864
	Miscellaneous	465	3,298	—	2,707 ²
2nd degree	— ¹	2,203	— ¹	— ¹	
Total		4,148	31,336	1,807	4,896

1. The figures include all group training completed in each country in the year mentioned. A small number of individual contracts, 46 in the United Kingdom, 130 in Belgium, 396 in the Netherlands and a few hundred in France for the benefit of repatriates from Algeria should be added to these totals. As the situation of the repatriates has now become normal, this improvised solution will slowly disappear in France while the Netherlands for their part will discourage the conclusion of individual contracts with firms.

In the total for group training, training given in the centres of the A.V.T. managing authority and in the approved and subsidised centres (firms or other associations) have been included. The former are by far the most numerous as shown in table B of annex II.

2. With the exception of contractors' plant mechanics, training in building trades prior to June 1963 was limited to disabled persons. The classes are now open to able-bodied as well as disabled persons and the majority of men are now being trained for building trades are able-bodied.

3. In order to keep within the framework of the data supplied by the British Ministry of Labour, numerically large groups were included under the heading « Miscellaneous ». Among those are hairdressers (321) ; commerce (including shorthand typing) (994) ; radio, television and electronic servicing (227). The group « commerce » is also a large one in France (1,183).

4. Only France makes a distinction between 1st and 2nd degree training. Among the training given elsewhere, courses for foremen in the building industry (Belgium) or engineering draughtsmen (United Kingdom) might also be considered as « second degree » training, their numbers not however being large enough to justify a separate item.

TABLE B. BREAKDOWN OF GROUP TRAINING ACCORDING TO THE MANAGING AUTHORITY

NUMBER OF PERSONS WHO HAVE RECEIVED TRAINING IN 1963

	BELGIUM	FRANCE	NETHERLANDS	UNITED KINGDOM
Centres directly managed by the A.V.T. authority	3,847	25,118	1,807	3,375
Approved and subsidised Centres	— ¹	5,006	—	1,521 ²
Subsidised Centres within firms	301	1,212	—	—
Total	4,148	31,336	1,807	4,896

1. A number of approved Centres have started to work recently in Belgium but no training had been completed at the end of 1963.

2. Among these a distinction should be made for the Special Centres for handicapped persons (687) and subsidised A.V.T. courses organized in schools or by local authorities (834).

Annex III
**VARIOUS ADVANTAGES GRANTED TO TRAINEES¹ IN THE GROUP TRAINING CENTRES
DIRECTED BY THE A.V.T. MANAGING AUTHORITY² (at 31 december 1963)**

	BELGIUM	FRANCE	NETHERLANDS	UNITED KINGDOM
<i>Basic allowance in lieu of earnings</i>	± B. Fr. 26 per hour worked.	S.M.I.G. (Minimum guaranteed interprofessional wage : approximately Fr. 1.882 per hour at 31.12.1963)	Fl. 60 per 45 hour week ³	£ 9.0.0 d. per week
<i>Social Security</i>	The managing authority pays the social security contributions which entitle the trainee, according to the laws of each country, to the main social insurance benefits (sickness, unemployment, family allowances, etc.) and to cover the risk of industrial injuries.			
<i>Supplementary Bonuses</i>	« Incentive » bonuses to trainees ranging from B.Fr. 900 to 1,800 for the full training period ⁴	Paid to certain categories of trainees (e.g. second degree) or by professional organisations for certain categories	Small bonuses based on performance, according to the marks given for work	
<i>Housing Allowances (for trainees who cannot return home every day)</i>	B.Fr. 110 per night (generally four nights a week) ⁵	Free housing, but payment by the trainee for meals taken in the canteen at the centre	Yes, in special cases ⁶	£ 3.0.0 d. to £ 5.0.0 d. per week ⁷

<p><i>Reimbursement of transport costs (daily, monthly or weekly)</i></p> <p><i>Bonus at the end of the course</i></p>	<p>Yes'</p> <p>Half the incentive bonus' plus bonus of B.Fr. 500 after six months in the trade.</p>	<p>Yes'</p> <p>Tools necessary for practising the trade supplied free of charge</p>	<p>Yes'</p> <p>To each trainee of one of the building courses : — tools supplied after training at the centre. — Fl. 3 per week for a fixed average training period for each trainee</p>	<p>Yes'</p> <p>Tools supplied if the trainee's job is in the trade for which he was trained</p>
--	---	---	--	---

1. The sole purpose of this table is to supply a comparative panorama of the advantages granted to trainees in each country. The basic allowance in lieu of earnings varies frequently according to the age, sex, social situation of the trainee, commune of residence etc. Moreover in this period of rising prices and wages it is subject to frequent adjustments either by decision of the authorities or automatically by the action of the cost-of-living index to which it is sometimes tied (Belgium, France). We have therefore found it preferable especially for the basic allowance to give approximate amounts based on averages applicable to trainees of over 21 but which cannot be regarded as mathematically accurate. The sums are given in the currency of the country concerned.
2. In the centres within firms the trainee normally receives a wage somewhere between the amount paid to an unskilled and a skilled worker, whilst under a financial arrangement the A.V.T. managing authority refunds to the firm part of the benefits granted.
3. Allowance considerably raised as from 2.1.1964, reaching approximately Fl. 100 per week for the worker over 23 with a family to keep.
4. This bonus is paid in two parts, the second part generally being granted in kind at the end of the course (working clothes or tools). It is partly a bonus granted during the course and partly a bonus for completing the course.
5. Whereas the living-in system is systematically organised for numerous trainees by the managing authority in France and the United Kingdom, trainees generally return home every day in Belgium and the Netherlands where the nightly allowance is only granted in exceptional cases. The respective size of the four countries easily accounts for this situation as also the fact that recruitment is almost entirely regional in Belgium and the Netherlands.
6. When the trainee is housed and fed free of charge by the centre the basic allowances are reduced accordingly.
7. Daily transport costs are generally reimbursed over and above a certain distance (\pm 5 km).



Annex IV

COMPARATIVE ESTIMATE OF COST OF
A.V.T. TRAINING COURSES ACCORDING
TO COUNTRY

We should like to have published a comparative table of costs in the various countries considered, for some of the most typical training courses given (e.g. masons, turners, welders, plumbers...).

For each of these trades it would have been interesting to break down the cost between the different items composing it, namely :

1. basic allowances for the length of the course ;
2. additional payment (e.g. housing, transport) ;
3. salary of instructors ;
4. cost of administrative or technical staff other than instructors ;
5. consumption of raw materials ;
6. amortization of equipment (implements and tools) ;
7. amortization of premises (or rent) ;
8. supply of power, lighting, heating ;
9. miscellaneous.

The data obtained in the Common Market countries to serve as a basis for the reimbursements of the European Social Fund (« Fonds Social Européen ») cannot be used since they only cover staff salaries (technical and administrative) and the advantages granted to trainees. The total is then multiplied by a coefficient which is supposed to represent expenditure difficult to control, which represents precisely most of the items listed above.

Moreover, the comparison of certain basic items and in particular expenditure on staff salaries is unreliable since, according to the administrative situation of the A.V.T. in each country, its relative autonomy or its degree of integration in a government department, the salaries of part of the staff who without being instructors help in the work of the A.V.T. may or may not be included in the data. For instance salaries

of staff represent over a third of total expenditure in the cost price communicated by the French authorities.

The various national authorities have nevertheless tried — and we are very grateful to them — to break down expenditure in respect of certain given trades to correspond more or less to the items listed above. Unfortunately the data supplied cannot be reproduced in a comparative table without the risk of confusing accuracy of figures and accounting accuracy.

In addition it is not essential for the A.V.T. in order to direct its policy, to have accounts of training costs for each of the different trades taught. An estimate, an approximate figure suffices for an organization which does not have to « sell » its products and to endeavour, as would an industrial firm, to cut out production of unprofitable goods.

An international comparison of expenses, subdivided into various items and showing the breakdown for each trade would only be useful if each country wished to analyse in detail the items which make up the cost of its training courses, in order to reduce the amount, in the light of the experience of other countries. Such a task is possible and could be performed despite its complexity. But its purpose would clearly be outside the scope of the present study.

Nevertheless those who wish to undertake such a work in the future will find below a number of data concerning in particular the variety of factors which go to make up the cost of training in each country, and will therefore learn the difficulties to be overcome to obtain a real genuine accountant's assessment of the financial implications of each course of training.

**

1. Whilst France and the Netherlands have established an *average* cost price for all trades per trainee and per unit of time, Belgium and the United Kingdom have calculated the cost per trainee for certain typical trades. It is at once possible to draw two preliminary conclusions from the data supplied :

a) Reduced to the same unit of time (1,000 hours i.e. approximately 22 45-hour weeks) the estimated rough figure for the average cost of the A.V.T. training courses as a whole is assessed as follows for 1963 for each of the four countries :

In France the amount is	F.F. 5,680
In the United Kingdom, the amount is	
£ 450 or	F.F. 6,300

In Belgium the amount varies from
B.Fr. 50,000 to 60,000 F.F. 5,000
to 6,000

In the Netherlands the amount is more
or less Fl. 3,000 i.e. over F.F. 4,000

For the Netherlands however, the considerable increase as from 2nd January, 1964, of the basic allowance granted to trainees (see footnote 3, annexe III) which forms the main factor in the cost will bring the latter to a level comparable with that of the other countries.

b) Reduced to the same unit of measurement, the costs per trainee in a given country are almost identical whatever the trade considered.

The Netherlands for instance estimate at Fl. 134 per week the cost of a training course in the Building Group and Fl. 139 the cost of a training course in the Metalworking group.

In the United Kingdom the difference is barely perceptible between 6 month training courses for the respective trades of plumber, welder and turner.

This conclusion is by no means surprising, since any variation in the consumption of raw materials, in power consumption and in the amortization of equipment and tools affects items of which the total in each country represents less than a quarter of total expenditure.

2. Although the average cost covering all occupations, *reduced to the same unit of time*, is comparable for each country this does not mean that the real cost of each training course is almost identical, since the training periods vary from one country to another and are considerably longer in Belgium and especially in the Netherlands than in France and the United Kingdom.

3. Moreover the items which make up total cost are not calculated in all countries, and this distorts the possibilities of comparison and in particular :

a) In France expenditure on investment (premises and heavy equipment) come under a special budget and their amortization is not included in the calculation of the cost of A.V.T. courses.

b) In Belgium, the salaries of staff other than instructors are included in the General Administration budget of the National Employment Office (« Office National de l'Emploi »). The same applies to certain overheads (e.g. transport office expenses which are covered

by the general budget for running expenses of general services).

Moreover, when the A.V.T. trainees are receiving unemployment allowances, this allowance is paid through a budget other than the A.V.T. which only pays a supplementary allowance.

4. Other factors make any comparison difficult such as the very different costs of board and lodging or the system of amortization of premises and equipment, not to mention difficulty of assessing the consumption of raw materials in individual training systems.

Annex V

**CERTAIN OPINIONS EXPRESSED BY TRADE
ORGANISATIONS IN THE NETHERLANDS
ON THE WORK OF ADULT TRAINING CENTRES**

As an experiment, we put some questions to a number of large trade associations in the Netherlands, both of employers and workers, and religious or lay, in order to obtain a general opinion from these associations, in particular with regard to the following problems :

1. value of the part played by A.V.T. in the training of skilled labour and the advisability of extending it if necessary ;
2. subject matter of the training given, efficiency and length of courses ;
3. advisability of extending the benefits of A.V.T. to young people under 18 ;
4. reform of lower level school vocational training syllabus, of apprenticeship contracts, and possible reduction of present duration.

*
**

Whilst pointing out that a satisfactory reply to such questions implied a survey among their affiliated members on the basis of a more detailed questionnaire, the Associations consulted :

- a) recognised the part played by A.V.T. and the useful contribution of skilled labour which it represents, especially for regions of agricultural and industrial « conversion » ;
- b) made few criticisms as to the subject matter of the training with which they stated they were satisfied ;
- c) limited the part played by A.V.T., however, to a complementary function and in no way considered that it should play a part in the vocational improvement of adult workers ;

- d) decided against lowering the age of admission to A.V.T. ;
- e) wished to maintain the present dual system of vocational training of young people which combined school training with training under contract in industry ;
- f) considered that they could not express any opinion without consulting the national educational authorities on the last question 4.

Although this survey has only been undertaken on the basis of a somewhat elementary questionnaire, the identity of the replies from such a variety of trade organizations is worth noting, the more so as in the Netherlands the development of opinion regarding accelerated training is by no means complete.

FROM THE CATALOGUE

ACCELERATED VOCATIONAL TRAINING FOR UNSKILLED AND SEMI-SKILLED MANPOWER (October 1960)

496 pages (crown 4to) 17s. 6d. US\$ 3.00 F 12.00 Sw.fr. 12.00 DM 10.20

EMPLOYMENT OF OLDER WORKERS No. 1 - JOB RE-DESIGN by Stephen Griew (August 1964)

86 pages (demy 8vo) 15s. US\$ 2.50 F 10.00 Sw.fr. 10.00 DM 8.30

ADULT EDUCATION TECHNIQUES IN DEVELOPING COUNTRIES A greek case study, by Pierre Fourré (January 1964)

138 pages (demy 8vo) Free on request

AGE AND EMPLOYMENT by Dr. A. Heron (December 1962)

62 pages (demy 8vo) 6s. US\$ 1.00 F 4.00 Sw.fr. 4.00 DM 3.30

EMPLOYMENT FORECASTING International Seminar on Employment Forecasting Techniques Brussels, 4th - 7th June 1962 (March 1963)

112 pages (demy 8vo) 9s. US\$ 1.50 F 6.00 Sw.fr. 6.00 DM 5.00

VOCATIONAL TRAINING IN THE FOOTWEAR INDUSTRY by Louis Rama (January 1961)

186 pages (demy 8vo) 15s. US\$ 2.50 F 10.00 Sw.fr. 10.00 DM 8.50

VOCATIONAL TRAINING FOR DOCKERS by Mr Daniel DAGALLIER

100 pages (crown 4to) Free on request

ADAPTATION AND TRAINING OF RURAL WORKERS FOR INDUSTRIAL WORK (December 1962)

138 pages (demy 8vo) 7s. 6d. US\$ 1.25 F 5.00 Sw.fr. 5.00 DM 4.20

RURAL MANPOWER AND INDUSTRIAL DEVELOPMENT (August 1961)

130 pages (demy 8vo) 10s. US\$ 1.75 F 7.00 Sw.fr. 7.00 DM 5.80

REVIEWS OF MANPOWER AND SOCIAL POLICIES : Labour market policy in Sweden (January 1964)

74 pages (demy 8vo) 6s. US\$ 1.00 F 4.00 Sw.fr. 4.00 DM 3.30

Manpower policy and programmes in the United States (February 1964)

208 pages (demy 8vo) 15s. US\$ 2.50 F 10.00 Sw.fr. 10.00 DM 8.30

MANPOWER STATISTICS 1950-1962 (December 1963)

140 pages (imperial crown 4to) 12s. 6d. US\$ 2.00 F 8.00 Sw.fr. 8.00 DM 6.50

O.E.C.D. SALES AGENTS DÉPOSITAIRES DES PUBLICATIONS DE L'O.C.D.E.

ARGENTINA - ARGENTINE

Editorial Sudamericana S.A.,
Alsina 500, BUENOS AIRES.

AUSTRALIA - AUSTRALIE

B.C.N. Agencies Pty, Ltd.,
62 Wellington Parade, East MELBOURNE, C.2.

AUSTRIA - AUTRICHE

Gerold & Co., Graben 31, WIEN 1.
Sub-Agent: GRAZ: Buchhandlung Jos. A. Kienreich, Sackstrasse 6.

BELGIUM - BELGIQUE

N.V. Standaard-Boekhandel,
Huidevettersstraat 57, ANVERS.
BRUXELLES: Librairie des Sciences (R. Stoops),
76-78, Coudenberg.

BRAZIL - BRÉSIL

Livraria Agir Editôra,
Rua Mexico 98-B, RIO DE JANEIRO.

CANADA

Queen's Printer - Imprimeur de la Reine,
OTTAWA.

Prepayment of all orders required.
Les commandes sont payables d'avance.

DENMARK - DANEMARK

Ejnar Munksgaard Forlag, Nørregade 6,
KOBENHAVN K.

FINLAND - FINLANDE

Akateeminen Kirjakauppa, Keskuskatu 2,
HELSINKI.

FRANCE

Bureau des Publications de l'O.C.D.E.,
2, rue André-Pascal, PARIS (16^e).

Principaux sous-dépôtaires :

PARIS : Presses Universitaires de France,
49, bd Saint-Michel, 5^e
Librairie de Médecis, 3, rue de Médecis, 6^e
Sciences Politiques (Lib.), 30, rue Saint-Guillaume, 7^e
La Documentation Française, 16, rue Lord Byron, 8^e

BORDEAUX : Mollat.

GRENOBLE : Arthaud.

LILLE : Le Furet du Nord.

LYON II^e : L. Demortière.

MARSEILLE : Maupetit.

STRASBOURG : Berger-Levrault.

GERMANY - ALLEMAGNE

Deutscher Bundes-Verlag G.m.b.H.
Postfach 9380, 53 BONN
Sub-Agents: BERLIN 62: Elwert & Meurer.
MÜNCHEN: Hueber. HAMBURG: Reuter-
Klößner; und in den massgebenden Buchhand-
lungen Deutschlands.

GREECE - GRECE

Librairie Kauffmann, 21, rue du Stade, ATHÈNES.

ICELAND - ISLANDE

Snaebjörn Jónsson & Co, h.f., Hafnarstræti 9,
P.O. Box 1131, REYKJAVIK.

INDIA - INDE

International Book House Ltd.,
9 Ash Lane, Mahatma Gandhi Road, BOMBAY 1.
Oxford Book and Stationery Co.:
NEW DELHI, Scindia House.
CALCUTTA, 17 Park Street.

IRELAND - IRLANDE

Eason & Son, 40-41 Lower O'Connell Street,
DUBLIN.

ISRAEL

Blumstein's Bookstores Ltd.,
35 Allenby Road, and 48 Nahlat Benjamin St.,
TEL-AVIV.

Les commandes provenant de pays où l'O.C.D.E. n'a pas encore désigné de dépositaire
peuvent être adressées à :

O.C.D.E., Bureau des Publications, 2, rue André-Pascal, Paris (16^e).

Orders and inquiries from countries where sales agents have not yet been appointed may be sent to
O.E.C.D., Publications Office, 2, rue André-Pascal, Paris (16^e).

ITALY - ITALIE

Libreria Commissionaria Sansoni
Via La Marmora 45, FIRENZE.
Via Paolo Mercuri 19/B, ROMA. Corso Cavour 93,
BARI.

Sous-Dépôtaires : GENOVA: Libreria Di
Stefano. MILANO: Libreria Hoepli. NAPOLI:
Libreria L. Cappelli. PADOVA: Libreria Zannoni.
PALERMO: Libreria C. Cicala Inguaggiato. ROMA:
Libreria Rizzoli, Libreria Tombolini. TORINO:
Libreria Lattes.

JAPAN - JAPON

Maruzen Company Ltd.,
6 Tori-Nichome Nihonbashi, TOKYO.

MOROCCO - MAROC

Éditions La Porte, Aux Belles Images,
281, avenue Mohammed V, RABAT.

THE NETHERLANDS - PAYS-BAS

Wholesale Agent: Meulenhoff & Co., N.V. Impor-
teurs, Beulingstraat, 2, AMSTERDAM C.
Principal Retailer: W.P. Van Stockum & Zoon,
Buitenhof 36, DEN HAAG.

NEW ZEALAND - NOUVELLE ZÉLANDE

Government Printing Office,
20 Molesworth Street (Private Bag), WELLINGTON
and Government Bookshops at
Auckland (P.O.B. 5344)
Christchurch (P.O.B. 1721)
Dunedin (P.O.B. 1104)

NIGERIA

University Bookshop Nigeria Ltd.,
University College, IBADAN.

NORWAY - NORVÈGE

A/S Bokhjornet, Lille Grensen 7, OSLO.

PAKISTAN

Mirza Book Agency, 65, The Mall, LAHORE 3.

PORTUGAL

Livraria Portugal, Rua do Carmo 70, LISBOA.

SOUTH AFRICA - AFRIQUE DU SUD

Van Schaik's Book Store Ltd.,
Church Street, PRETORIA.

SPAIN - ESPAGNE

Mundi Prensa, Castelló 37, MADRID.
Libreria Bastinos de José Bosch, Pelayo 52,
BARCELONA 1.

SWEDEN - SUEDE

Fritzes, Kungl. Hovbokhandel,
Fredsgatan 2, STOCKHOLM 16.

SWITZERLAND - SUISSE

Librairie Payot, 6, rue Grenus, 1211, GENÈVE 11
et à LAUSANNE, NEUCHÂTEL, VEVEY,
MONTREUX, BERNE, BALE et ZURICH.

TURKEY - TURQUIE

Librairie Hachette, 469 Istiklal Caddesi, Beyoglu,
ISTANBUL et 12 Ziya Gökalp Caddesi, ANKARA.

UNITED KINGDOM and CROWN

COLONIES - ROYAUME-UNI
H.M. Stationery Office, P.O. Box 569, LONDON,
S.E.1.
Branches at: EDINBURGH, BIRMINGHAM,
BRISTOL, MANCHESTER, CARDIFF, BELFAST.

UNITED STATES OF AMERICA

McGraw-Hill Book Company, O.E.C.D.-Unit,
TMIS Annex, 351 West 41st Street,
NEW YORK 36, N.Y.

YUGOSLAVIA - YOUGOSLAVIE

Jugoslovenska Knjiga, Marsala Tita, 23, P.O.B. 36,
BEOGRAD.

O.E.C.D. PUBLICATIONS
2, rue André-Pascal, Paris XVI^e
No. 17,989

•

PRINTED IN BELGIUM

END 2-4