As our readers are aware, a European Centre for the development of vocational training has been set up in West Berlin by an EEC Council Regulation of 10 February 1974.

Among the tasks which have been assigned specifically to the Centre, publication of an information bulletin on vocational training is one of the chief priorities. Now that the Centre is fully operational it has been requested to assume direct responsibility for the preparation and editing of the present Bulletin beginning in January 1977.

In 1977 it is expected that, except for a few minor alterations, the Bulletin will continue to appear in its present form. In 1978 it is possible that the Bulletin will adopt a different form but this will be announced and explained during the course of 1977.

As we take leave of our readers, we wish to thank them for the interest they have expressed in the Bulletin and for the support they have extended to us throughout the last three years. We have made every effort to fulfil the task entrusted to us; perhaps we have succeeded, although mistakes have been inevitable. But since errare humanum est we would like to hope that our readers will forgive our errors and extend their grateful appreciation for those positive aspects of the work carried out.
Use of programmed instruction -
the present and future situation

by Carsten Rosenberg Hansen (1)

Some general trends

Since its appearance about 20 years ago, programmed instruction has developed and spread considerably. This is particularly apparent in countries such as the USA, the UK, Federal Republic of Germany and Sweden where there are several thousand published teaching programmes in various subjects and at various levels. In addition there is an unknown but very large number of programmes which are not available to the public - for example, those used in military training or as part of staff training courses within private firms.

Programmed instruction has developed largely as a result of experience gained with various teaching programmes in different teaching contexts. In this way considerable knowledge has been gained both concerning the subjects and types of material which can be programmed most effectively and at the same time on the use of the various media which can be used to impart programmed instruction. Most teaching programmes take the form of booklets or books and will continue to do so; but, particularly in recent years, there has been a sharp increase in the number of audiovisual teaching programmes and programmed instruction via computers is developing steadily. Finally, interest has been growing in the teaching contexts in which teaching programmes can be used and the educational goals which might be achieved through programmed instruction. Consequently teaching programmes have been developed to introduce new sub-

jects as well as programmes which elaborate varying aspects of a subject at various levels, purely exercise or training programmes, practice drills, selective remedial programmes etc. This development has meant that today there is so varied a supply of teaching programmes in some subject areas that it is possible to a large extent to satisfy the demand for differentiated instruction. We may expect this development of individualized teaching to continue; on the other hand, there is a constant shortage of programmed material specifically designed for group work or joint study.

Hand in hand with the development which has resulted from experience with teaching programmes there has been a more theoretical development, a development of the term 'programmed instruction' itself, since most programmes in booklet or book form are still primarily constructed as linear programmes of the well known Skinner type: the material is divided into a sequence of short units (frames) each containing a short exercise or a question, the answer to which the pupil can check immediately.

But this is not the only possible way of systematically guiding and controlling the learning process or of organizing subject matter. The main problem is the best way of organizing the particular subject matter to be absorbed; this includes methods of structuring and organizing the subject matter, the progress of the learning process, pupil activities which should be emphasized or can be most efficiently utilized etc. Since the appearance of the Skinner programmes, several other programme techniques have also been developed which provide ways of solving the problems referred to above on the basis of different theoretical assumptions. Some of the newer techniques which may be mentioned are Gilbert's 'Mathetics', Landa's 'Algorithmic rules', Frank's 'W-T Didaktik' and Hodgson's 'Structural communication'. (1)

Programmed Instruction in Denmark

Programmed instruction has also received considerable attention in Denmark. Many people have worked hard to popularize and extend the use of teaching programmes, and developments in programmed instruction have been followed with great interest. For example, a department of programmed instruction has been set up at the Statens Erhvervspædagogiske Læreruddannelses (National College for the training of vocational teachers) and the college has been giving courses on programmed instruction and on the production of teaching programmes for a number of years; a total of about 500 persons, mainly vocational training instructors, have attended these courses. In spite of the great interest, programmed instruction is still not as widespread as

(1) Mr Rosenberg Hansen has been on the staff of the Statens Erhvervspædagogiske Læreruddannelses (National College for the training of vocational teachers) since 1971, and his work has mainly concerned research methods for the organization of teaching texts on a psychological basis.
many had expected. Today there are only about 100 published programmes, some of them translations of foreign programmes; about 40 programmes are mainly designed for use in public primary and lower secondary schools (folkeskolerne) while the remainder are intended for higher education or for use in vocational schools. The fact that there are so relatively few published teaching programmes may of course be connected with the economic risk involved in publishing on such a limited market as the Danish one. One might well assume that the actual number of original Danish teaching programmes is small. This requires further comment however.

A number of teachers at vocational schools have the specialist knowledge and teaching background needed to help develop teaching programmes. The course referred to above is one reason for the production of some 800 programmes or draft programmes in the past few years and graduates of the course have been largely instrumental in testing and using them in their own teaching (these programmes are listed in the college’s prospectus of programmes) (2). The considerable number of courses produced gives an indication of the potential. It should, however, be emphasized at the same time that developing a programme can be very elaborate and time-consuming. To produce a good teaching programme requires not only accurate planning (for example, description of the aims) and elaboration; the various draft programmes must often be drafted and revised several times before a suitable version with the desired learning effect is achieved. Specialist teachers who have the necessary desire and energy to set about producing a teaching programme must generally be prepared to devote a large part of their free time to the work. In view of this it is obvious that the number of completed teaching programmes only increases slowly and it might be desirable to create suitable economic opportunities and circumstances which would release interested teachers for more intensive programme production.

**Outlook**

There is no reason for thinking that programmed instruction will have a less predominant place among the various forms of teaching in the coming years. New programming techniques are constantly emerging, to be tested and if possible included in the repertoire authors of programmes have at their disposal. At the same time we can expect continued development on the media side; in recent years, however, there has been a growing tendency for a fall in the price of the increasingly advanced technical equipment to be accompanied by a rise in the price of the accompanying software so that programmes have become more complicated and therefore also more expensive to produce. However, a development of the product is scarcely adequate in itself to produce a powerful expansion of programmed instruction. At least as decisive is an increased demand for programmes created by a greater understanding and consciousness of the potential uses of programme instructions. Various trends are apparent in this connection.

We must continue to expect an increasing need for retraining, further training and in-service training. Various forms of correspondence course will also provide a motive for producing and using teaching programmes. We are familiar, for example, with developments in England (The Open University), but in Denmark, too, experiments are being made in individualized adult teaching. (3) Another important trend is the attempt to achieve greater differentiation in instruction (directed teaching). This involves adapting the subject matter to suit the individual pupil or group of pupils within the framework of the class and choosing subject matter, methods and working patterns, taking into account the ability, desires and interests of the individual pupil or group. Such an extensive individualization of instruction not only places greater demands on teachers but also requires a differentiated range of teaching aids. A great deal of new teaching material, exercises and tests have to be worked out. This is where teaching programmes can be a very worthwhile element in instruction.

**Bibliography:**

105. New apprenticeship system in Ireland

After a nationwide consultation process which has taken place over the last two years, the Irish Industrial Training Authority - AnCO has decided to go ahead with plans to introduce a new apprenticeship system which will cater for the skilled manpower needs for the further development of the Irish industrial economy.

Important features of the new apprenticeship include compulsory off-the-job training in the first year of training, carefully monitored on-the-job experience, day-release during the first three years and compulsory testing and certification (See item 73, Issue 4/75).

Preferably following a short induction period in industry, off-the-job training is to take place in approved apprentice training centres, within industry or in AnCO training centres, where an industrial environment will be simulated as closely as possible. For example, apprentices will work the normal industrial forty-hour week and the normal working year will apply, conditions which aim to help the apprentice to appreciate fully the conditions in the work situation.

The introduction of compulsory off-the-job training for all apprentices has made it viable to shorten apprenticeships from five to four years, or from five to three years if the entrant holds a school leaving certificate. The duration of apprenticeships will be reviewed in 1981.

Another important aspect of off-the-job training is the instruction given in vocational schools or technical colleges during the first three years of apprenticeship. These courses include some practical training, some theory work and a related and general education content.

Their duration must be the equivalent of at least one day per week in each academic year.

The new scheme recognizes the importance of on-the-job experience in ensuring that the apprentice gains work experience and develops maturity, confidence and judgement. This part of the training will be monitored by AnCO's Training Advisory Service.

Discussion of the new apprenticeship scheme showed that there was general agreement on the need for an up-to-date and systematic approach to design of curricula for the education and training aspects. An Advisory Curriculum Committee under the auspices of AnCO, the Department of Education, representatives of employers, trade unions and education and training interests has therefore been set up to formulate outline training and education syllabuses and approve detailed curricula for each craft.

A further unit will be set up within the Curriculum Development section of AnCO. This unit, in collaboration with the Department of Education, will be responsible for the design and updating of national standard training, educational curricula and testing procedures.

Under the new scheme, AnCO has also undertaken

- to organize and finance training courses for skilled men and, as far as training capacity will allow, offer courses for temporarily unemployed craftsmen and apprentices
- to continue to provide places in skilled training for girls in certain AnCO centres
- to provide training for non-designated occupations and, in this respect, to take account of likely developments in the Common Vocational Training Policy of the EEC.

The past unplanned approach to apprentice recruitment has resulted in critical shortages of some categories of craftsmen in certain areas. AnCO therefore considers it necessary to plan the annual apprentice intake. To protect the interests of craft unions, employers and the economy a system will be developed whereby both employers and craft unions are fully informed of the basis on which manpower projections are made and there is full consultation before decisions on intake numbers are taken. AnCO will set up a new unit responsible for the provision and interpretation of information on manpower training needs.

By 1981 the annual intake figure for apprentices is expected to rise to 3 500. It is estimated that implementation of the scheme will incur capital expenditure of £1.8 million over the 1976-1981 period and extra annual operating costs will rise over the same period to £2.2 million.

Industrial training has traditionally been funded jointly by industry and the State, recently with some assistance from the European Social Fund. The cost of training for new industries will now be borne by the State, although assistance will be sought from the Social Fund to finance off-the-job training.

Sources:
The New Apprenticeship.
Diagrammatic layout of the new apprenticeship

KEY TO ABBREVIATIONS:
NMS — National Manpower Service
IDA — Industrial Development Authority
VEC — Vocational Education Committee

STUDENT

POST PRIMARY EDUCATION

GROUP OR INTERMEDIATE CERTIFICATE

AGE 15 +

LEAVING CERT.

MANPOWER INFORMATION

AGREED INTAKE

NEW INDUSTRY AnCO-RECRUITS

EXISTING INDUSTRY EMPLOYER RECRUITS

JOB APPLICATION

APTITUDE TEST

INTERVIEW

SECURES APPRENTICESHIP

REGISTERED WITH AnCO

IN-SCHOOL CAREERS

COUNSELLING

1ST YEAR

OFF-THE-JOB TRAINING & EDUCATIONAL RELEASE

AnCO CENTRES

VEC CENTRES

INDUSTRY CENTRES

2ND YEAR

ON-THE-JOB EXPERIENCE & EDUCATIONAL RELEASE

INDUSTRY

VEC

3RD YEAR

ON-THE-JOB EXPERIENCE & EDUCATIONAL RELEASE

INDUSTRY

VEC

4TH YEAR

ON-THE-JOB EXPERIENCE

INDUSTRY

TEST FOR NATIONAL CRAFT CERTIFICATE

CURRICULUM ADVISORY COMMITTEE

DEPT. OF ED.: AnCO
TRADE UNION: EMPLOYER

HIGHER LEVELS

CRAFTSMAN
106. Evaluation of vocational training in the UK

(See Article, Issue 3-1976)

1. The UK is faced with the same problems as Italy, namely a lack of balance between the total number of school-leavers and the needs of the labour market and ensuring that the education and training provided meets the needs of industry. In the case of the former a number of experimental schemes have been launched to alleviate the pressures of high unemployment amongst school-leavers at the trough of the trade cycle including a job creation programme and inducements to employers to engage more young people in long training occupations. Plans are now afoot to try and resolve the latter problem by supporting in appropriate ways the development by the further education service of provision of relevant — orientated courses, for example courses leading to technician qualifications or to a high standard of office and commercial skills; by encouraging employers wherever necessary to provide appropriate opportunities for new entrants to employment who have taken such courses and by helping to strengthen links between schools and industry.

2. The Italian research project highlights the need for a unified vocational preparation system. It identifies the requirement to ensure that the goals of education, training and industry are brought more together. This will be greatly facilitated if the learning objectives (curricula) developed by school, training institutions and further education colleges, as well as the values they pass on can be expressed on a common basis, with the overlap identified and roles clearly understood. Such an outcome will only be achieved if industry and training institutions are aware of the needs of young people and schools and colleges of further education are more aware of the requirements of working life and future job/career opportunities and if there are national arrangements to enable this to take place.

3. In the UK the Manpower Services Commission through its agencies has stressed the importance of developing an effective and efficient vocational preparation system and providing relevant and adequate training for young people, particularly those entering first employment. It has commissioned research to develop a system to identify skill, knowledge and other human attributes which, it is hoped, will eventually enable relevant, accurate job information to be identified to career advisers, teachers, instructors, guiders, trainers, personnel officers etc. For the shorter term the Government and the Manpower Services Commission have recently issued a consultative document discussing the possibility of fundamental changes in the way basic vital skills are currently provided in industry. If these proposals are implemented the new approach, to be known as collective funding, would be designed to provide employers with a fresh incentive to develop more systematic training of young people in those vital skills which are needed by many employers across industry and which are often in short supply just at the time when the economy most needs them. The incentive to employers to recruit the right type of young people would come through payments to them from a fund contributed to by both Government and industry for all or part of the initial training.

4. Research in the UK has diagnosed that a large proportion of unqualified school-leavers lack the basic skills and knowledge needed for work, and pilot experiments in providing remedial training courses are to be carried out in conjunction with the education departments. Thus, research of the kind undertaken in Italy is to be encouraged as it gives pointers to those concerned with the provision of education and training for the 16-19 year olds, i.e. whether to encourage the development of new approaches to initial job training in schools, colleges of Further Education or in-Company, the types of instructor/teacher needed and their selection, and methods of instruction and content.

107. The export of vocational training from France

In 1974 a number of significant changes took place in the overseas training market as the extra revenue acquired by oil-producing countries was utilized towards the conception of vast industrial, agricultural and educational projects. As a direct result of this two types of training demand arose:

— training accompanying private industrial contracts e.g. training in the use and maintenance of machinery supplied

— training to be supplied as a result of government demands for improved training systems or improved internal organization.

The first of these types of training was considered extremely important, not only because it occurred in potentially very important markets but because the cost of the training worked out at approximately 10 - 12% of the total contract.

Despite the fact that the French training system was well equipped to deal with these training demands it soon became clear that there were several unforeseen problems. Overseas countries tended to overestimate the speed at which they could develop, while, at the same time, they underestimated the size of the projects undertaken, even failing on occasions to conceive the impossibility of their realization. The French, on the other hand, soon realized that the training offered by them did not always correspond to the needs of the country concerned. It was apparent that the French training mechanism was not inexhaustible and that a new approach, which included suitably selected objectives, was therefore required.

An investigation carried out by the Agence pour la coopération technique, industrielle et économique — ACTIM (Agency for technical, industrial and economic cooperation) showed that out of those firms concluding export contracts of more than FF 10 million at least half of them were experiencing difficulties in training personnel in the use of machinery supplied by them.

As a result of these problems an effort has been made by the Ministère du Commerce (Ministry of Commerce) and other relevant ministries to provide a service for the supply and exchange of information. In due course a list of initiatives undertaken by each ministry will be drawn up. As a part of this, for example, the Secrétariat
d'Etat à la Formation Professionnelle (Secretariat of State for Vocational Training) will analyze a report prepared by the Centre INFFO on the capacity of the French training system to meet the demands of other countries. As a further aid to industry ACTIM has commissioned a study of overseas training markets.

ACTIM, in conjunction with other organizations, will also act as the office for assessing requests for vocational training from other countries.

Source:
Ministre français du Commerce extérieur.

**108. Youth unemployment in the European Community**

(Continued from item 99, Issue 3-1976).

**European Economic Community**

According to the latest figures issued by Member States the trend in youth unemployment within the Community remains upward. Although figures are subject to variation, owing chiefly to seasonal factors, comparison of 1976 statistics with those for 1975 show that in every country except Germany the level of youth unemployment in the late summer of 1976 was higher than a year earlier. This increase can be traced back to at least 1970, since when the trend has proved to be both regular and consistent. At the same time the proportion of young people among the unemployed has also increased, so that the employment position of young people has deteriorated both absolutely and relatively.

A further disturbing feature of the statistics is the growth over the last two years in the number and proportion of young people who remain unemployed for a relatively long period. Member States are now initiating appropriate measures to alleviate the problem following a recommendation put forward by the Commission (see Issue 3/76).

**The Netherlands**

In the Netherlands the Minister van Sociale Zaken (Minister of Social Affairs) has introduced a number of new measures to combat rising youth unemployment.

In the past year there has been an overall increase in the number of unemployed young people under 23 years old in the Netherlands, a much greater increase than in the 23 and over age group. The most marked increase in unemployment has occurred among school-leavers under 19, while on the other hand there has been a decrease among those people in the under 19 age group who are not school-leavers (i.e. those who have worked between school and unemployment). General unemployment is running at approximately 227,000 which the government hopes to decrease to 150,000 by 1980.

In an effort to attain this the Minister has introduced four main categories of measures to combat youth unemployment. Of these two are an extension of provisions already in operation.

The first of these four categories takes the form of a temporary subsidy for employers against the cost of wages for young people employed by them who have been unemployed for a continuous period of six months. This measure will run until 31 December 1977 and is directed at young people aged 17 - 22, of whom there are about 22,000 (a comparatively large proportion of these being women).

One fear is that if young people are not trained now, a shortage of skilled and trained people will be encountered in the future. In order to stimulate and safeguard the training of young people an allowance of Fl 80 for each week worked will be granted to a firm which takes into its service one of this year's school-leavers and gives him or her practical training. In the case of a trainee who is still subject to compulsory part-time education the allowance is Fl 60, but the employer is then also entitled to the premium granted for employing someone still undergoing part-time education. This measure will run until 30 June 1977 and is also applicable to school-leavers beginning their training in a bedrijfschool (Company training school).

The allowance is conditional on an employment contract being arranged as well as an apprenticeship contract. This prevents firms avoiding payment of the minimum youth rate.

The above-mentioned system of premium payments for employing a young person registered for two days a week compulsory education at a recognized institute or firm's course has been extended by a year and the amount raised to Fl 50 (from Fl 45) per week. This is thought to affect approximately 50,000 young people.

The interim measure on youth unemployment, which aims to involve unemployed young people in the work process by granting a subsidy per head for projects set up by non-profit-making institutes, has been extended to 1 July 1977. Under this measure purposeful projects in the social and cultural fields are envisaged. Participants must be no older than 23 and cannot be employed under this provision for longer than a year, although in certain circumstances there is the possibility of lengthening this by six months.

The subsidy is awarded according to age with a maximum of Fl 545 per completed week for a 23 year old. The total amount accorded to funding these measures is Fl 210 million.

Also under discussion is the idea of duo-banen (duo-jobs) whereby two people carry out one job, for which they receive one salary and one unemployment allowance to be shared between them.

In 1976-77 special vocational preparation courses are to be run for those groups which experience particular difficulty in finding employment due to a lack of previous training.

There will be two types of these courses, both of which are to be offered at each streekschool (regional school for vocational education) a total of 62 courses. The first type will be aimed at young people with only a
general secondary school diploma (m.a.v.o., h.a.v.o. or v.w.o.) and the second at those without any kind of diploma. The duration of both types of course is a maximum of one year.

United Kingdom

In the UK young people have been hit particularly hard by recent increases in unemployment. Between July 1973 and July 1976 the proportion of young people among the unemployed has increased from 12.5% to 27.8%.

In an effort to combat this rise the Government has introduced a number of new measures in addition to expanding those measures already in operation. Most of these are administered by the Manpower Services Commission (MSC) which is accountable to the Secretary of State for Employment. The MSC itself operates through two agencies, the Training Services Agency (TSA) and the Employment Service Agency (ESA).

One of the schemes which has recently been expanded is the Training Opportunities Scheme (TOPS). The aim of this scheme is to provide people with more and better training opportunities in ways that will help them meet their own employment aspirations and at the same time meet national manpower requirements. TOPS was originally set up to benefit those over 19 years of age, but, regulations have recently been changed so that 16-19 years olds may also qualify for grants. The objective for 1976 is to train 80,000 people, of whom it is hoped there will be at least 10,000 young people.

Another major scheme launched in October 1975 is the Job Creation Programme, operated by the MSC on behalf of the Government. This scheme aims to provide temporary worthwhile jobs for those who would otherwise be unemployed. Projects are run by sponsors from the community — mostly local authorities — while the MSC provides grants to cover wage costs. The scheme is biased towards young people so that 80% of jobs created under the scheme are held by people under 24. Projects will now run until September 1977.

Among more recent measures is the MSC's Work Experience Programme, which is designed to give unemployed young people under 19 years of age a realistic introduction to the requirements, disciplines and satisfactions of working life, thereby better equipping them to obtain a permanent job when the economy improves and job opportunities increase. It is hoped that some 30,000 young people will benefit from the scheme, under which participants will receive a maintenance allowance from the MSC. Work experience schemes may be mounted by any employing organization for a period of 6-12 months. Employers will plan schemes for approval by the MSC and provide supervision and support for those young people taking part, while opportunities for training and further education are to be incorporated wherever possible.

As part of the general aim to raise the skills and knowledge of the country's workforce an experimental programme in vocational preparation for young people has been developed jointly by the Education Departments and the TSA. The basic objective of this programme is to secure an easier transition from full-time education to work. The experiment will begin with 20 pilot schemes of further education and training which will either precede or follow entry into work or span the transition from education to work. The schemes comprise 12 week courses run on a full-time or part-time basis and it is expected that they will indicate what forms of vocational preparation will attract young people and win the support of employers.

The payment of subsidies to employers engaging unemployed young people has now also been revised. The former subsidy paid to employers for recruiting school-leavers having difficulty in obtaining their first job has been replaced by a Youth Employment Subsidy, a temporary scheme whereby employers are granted a subsidy for employing young people under 20 who have been registered as continuously unemployed for six months or more. The Government has applied for help from the European Social Fund to help cover the cost of some of these new schemes.

Federal Republic of Germany and France

At a recent meeting of the Bund-Länder-Kommission für Bildungsplanung (Bund-Länder Committee on Education Planning) it was decided to formulate an action programme to deal with the problem of youth unemployment. One of the major reasons behind this decision is the prospect of a considerable shortage of training places in the early 1980's, a possibility which is strengthened by the fact that there has already been a perceptible fall in available training opportunities in certain sectors and in certain regions.

In France a report on the effectiveness of measures introduced in January 1975 has been published by the Centre INFFO. The report shows that these measures, which were aimed at young unemployed people of 16-20 years old who either had no qualifications or possessed qualifications unsuited to the labour market, were to a great extent successful. The report also puts forward a number of recommendations for the improvement of these measures from an administrative point of view.

Sources:

I - Innovations relating to training itself

(i) Pedagogical methods

In the sphere of initial training the idea of the traditional course being part of a rigid programme involving instruction by a teacher of a class restricted to listening and taking notes, and which is a composite of lessons and exercises performed outside the class, is gradually being phased out.

In the field of vocational training this procedure practically no longer exists. The theoretical teaching of adults is, in fact, one of the areas on which in thirty years, the French Association Nationale pour la formation professionnelle des adultes — AFPA (National Association for the training of adults) has been developing new methods.

The principal objectives are to encourage those concerned to participate in their own training, to teach them to learn rather than to accumulate knowledge, and to adapt education to real-life conditions.

To this end we see the development, for example, of the following:

(a) study in small groups whereby each person transmits his knowledge to others;

(b) theoretical teaching alternated with a training period at a centre and a training period in industry in the form of a practical course;

(c) individualized apprenticeships which allow each trainee to choose his own training schedule or 'sequence training' linked with a system of continuous in/out training.

Increasing attention is being devoted to preliminary guidance and to the individual follow-up of trainees.

Application of these methods presupposes a certain uniformity in the trainees' abilities and for this reason so-called 'pre-training' measures have been developed which allow those concerned to acquire or regain in a short space of time the minimum amount of knowledge required to undergo training successfully.

(ii) Training aids

Vocational training is marking more and more frequent use of new training aids, particularly those involving audio-visual techniques.

These are used both with the aim of attracting a public interest in training and as a direct means of training. Various aids are used:

- television and radio to broadcast courses, and video equipment to show films; in certain cases the instructor or the programme planner may communicate with the participants by telephone. Representatives from those occupations for which the training is intended are frequently entrusted with the production of programmes or films. A number of such productions exist in France : 'Télè-promotion rurale' for farmers, 'Radio animation pêche' for fishermen, 'Artisanat Bretagne' for Breton craftsmen, 'Ciné promotion armées' for young people undergoing military service; courses run by the Conservatoire national des arts et métiers (National Conservatory of Arts and Crafts) are broadcast on television: and the Ministère de l'Education (Ministry of Education) regularly broadcasts television programmes aimed at the training of adults, entitled 'RTS promotion'. Most of these programmes also involve the publication of accompanying written texts.

- slides are used to the same effect, particularly for craftsmen and they are often accompanied by a soundtrack.

- vocational training also makes use of programmed instruction and correspondence courses; the latter often result in occasional meetings which serve to reinforce their effectiveness. These techniques are especially used in cases where the public is spread over a wide area.

(iii) Examinations and diplomas

The innovations in pedagogical methods and training aids together with the choice of programmes based on real-life conditions have had important repercussions on examinations and diplomas.
Examination topics chosen are increasingly being related to real-life situations and present a concrete and practical perspective; purely academic exercises are gradually being replaced by less traditional methods such as oral examination by interviewing panels or the drawing up of reports; examination panels are increasingly calling on the services of experts.

In some instances the rate of change is even more advanced; examinations are not taken all together at the end of the academic year or the training cycle but throughout the duration of the course.

This is particularly so in the process of attaining diplomas by credit units. The basis of this system is the training unit; this provides comprehensive training at a given level and in a given field and is defined by its objectives and not by a programme of skills.

The Certificat d'Aptitude Professionnelle - CAP (Certificate of Vocational Aptitude) is gained through credit-units and is awarded when the trainee is able to justify his possession of all the ability reports which make up the units constituting the CAP.

Ability reports are awarded when evidence is presented of the person's skill in carrying out the task which has been set. Evidence of the skill could be indicated by a direct monitoring of capabilities or by training resulting in continuous monitoring of the knowledge acquired.

This system, used at first for adults, has progressively become practice for students at technical colleges.

### II - Innovation in organization and procedures

As vocational training has developed there has been the formation of specific structures and procedures.

Thus vocational training in France is characterized by the following aspects which have or have had a certain innovatory nature.

(i) **Vocational training policy is a coordinated and planned policy**

| This means that decisions are taken, nationally or locally, at inter-ministerial level and with the active participation of employers' and employees' representatives. The role of the social partners is very significant; i.e. particularly those who signed the agreement on vocational training in July 1970. |

(ii) **A number of new procedures and techniques have been formulated**

One should especially mention:

- training leave, established in the above agreement and ratified by law, which allows all employees to obtain leave to attend a training course.
- special training funds which guarantee the joint administration by employers and employees of funds allocated by industry for the training of their employees.
- vocational training agreements, which are contracts by which the State participates in the financing of training measures.

(iii) **The methods of financing are numerous**

As well as the State aid granted by the above mentioned agreements there is also compulsory contribution by industry.

The law of 16 July 1971 provides that each firm of ten or more employees must allocate an annual sum equal to at least 1% of the total wage-bill to the training of its employees.

Furthermore, aid from the European Social Fund may be granted towards certain measures.

(iv) **The application of this policy is occurring increasingly at the regional level**

Although French administration is traditionally centralized, virtually the whole of public vocational training means are now placed under the auspices of the regional committees for vocational training, social advancement and employment.

### III - It is in this framework of innovation that a number of pilot schemes have developed

These pilot schemes are generally directed at specific sectors of the public.

Naturally, it is impossible to present a complete list of these schemes, since several have ceased to be pilot schemes insofar as, having succeeded, they have been integrated into training systems.

Among those sectors of the public benefiting from these schemes we should mention the following:

(i) **Young people without professional qualifications**

One must realize that these young people have no wish to return to school and this is why very different methods to traditional courses have been adopted, so that general education is alternated with initiation into working life in production areas. Representatives of the vocation are generally involved in the planning and institution of the training.

(ii) **Women who wish to take up a job again after a long period of inactivity**

First one must determine the vocational guidance which suits them best and then the training must be adapted to this guidance: this objective is achieved through individual interviews. The actual training includes revision of general and vocational skills and indirect initiation into working life through practical training courses.

(iii) **Self-employed workers: especially farmers, shopkeepers and craftsmen**

Principal efforts have been aimed at imparting concrete ideas on business management, with particular emphasis on modern teaching methods such as audio-visual aids and programmed instruction.

(iv) **Migrant workers**

The largest number of pilot schemes have undoubtedly been instituted for
this sector. They involve, in particular, the training of trainers, migrant children who have already received education, the improvement of adult literacy, the socio-vocational adaptation of adults or even preparation for return to their country of origin.

The methods used are equally diverse, but usually they are based on the use of programmed instruction and audio-visual aids.

(v) The inhabitants of certain areas

Here we are concerned with giving a whole area's population a collective training. In France collective training schemes have been developed in Lorraine, the Nord, Alsace and Burgundy by the ACUCES.

More recently, campaigns for continuing education have been started in five priority urbanization areas and five new towns, where the object is to assess the overall needs and set up suitable training machinery to meet them.

This experiment is significant for several reasons. First, because it is being developed openly rather than inside organizations offering ready-made training schemes. Also because it reaches marginal groups of the population, who can undertake vocational training which up to now has only been available in or around established businesses. Finally, because one can see the formulation of new models of pedagogical action which are neither strictly vocational training nor sociocultural stimulation in the ordinary sense of the term.

110. Exchange schemes: opportunities for Irish and Danish teachers

Cultural agreements

Both Ireland and Denmark have cultural agreements with France concerning the exchange and interchange of teachers. Under the Irish agreement there are three main schemes, the first of which concerns the exchange of experienced teachers. A number of exchanges of a one-semester duration have taken place in recent years on a school-to-school basis. Irish teachers who take part are graduate French teachers with at least four years' experience. Under the scheme the Irish and French teachers each receive their salary from their respective home authorities but in addition to this the Irish teacher is paid an extra allowance while resident in France.

The second main scheme is the exchange of language assistants between French and Irish schools, a scheme which is being extended to German schools. Language assistants are generally students who are between the third and fourth years of their university course and they are engaged for one school year to help the regular language staff by conducting conversation classes in the foreign language. The reception of Irish assistants in French schools is administered by the French Cultural Services. In Denmark there is no exchange of language assistants owing to the lack of interest of other countries in learning Danish.

The third main scheme in Ireland is a project on the intensified teaching of French. Under this scheme, which began in 1972/73, a teacher from France takes a group of Irish students from three or four nearby schools and instructs them in the French language for 4 1/2 hours per week throughout their secondary school life. A joint certificate of proficiency in French will be awarded by the Department of Education and the French pedagogical services and will be associated with the Irish Certificate examinations taken by the pupils.

Under Denmark's cultural agreement with France a number of short-term further education courses are arranged annually in France for Danish teachers. The total number of places on these courses is 107 and they take place in Grenoble (two weeks), Vichy (two weeks), Sèvres (two weeks), at Saint Nazaire (five weeks) and at a French university (four to six weeks). These courses are for one or more of the following categories: comprehensive school teachers, college of education teachers, grammar school teachers, and business school teachers. For these courses the French government awards scholarships to all the participants. They are expected however, to pay their own travelling expenses, possibly with a grant from the Danish Ministry of Education.

Denmark also has cultural agreements with Belgium and Germany. In the Federal Republic of Germany summer courses are arranged for Danish teachers, students of German and students at teacher training colleges. In all about 65 places are available on these courses, which include, for example, a four-week further education course in Lübeck for comprehensive school teachers. Five Danish teachers are received at schools in Nordrhein-Westfalen on a guest stay of three weeks. Living and course expenses are paid by the German authorities, but again not travelling expenses.

Council of Europe Scholarships

There are various short-term fellowships or scholarships available, of which teachers and educationalists can take advantage. Irish teachers have so far taken part in short training courses in the UK, Switzerland, the Netherlands, France and the Federal Republic of Germany. Teachers also have the opportunity to take part in further education courses in Scotland (as from this year) and Austria. So far Denmark has received a high proportion of the scholarships available for these courses.

Unesco Study for Workers' Education Leaders

Unesco awards travel grants to enable workers' education leaders in its member countries to study each others' Adult Education Programmes and exchange views.

International Post-University Courses

Irish teachers have attended these one-week courses in mathematics, physics, chemistry and biology which are offered annually by the Belgian Ministry of National Education and Culture and held at either the University of Liège or Ghent.
111. International conference on adult vocational training in the commercial sector

A working symposium of directors of prominent European commercial training establishments was held recently at the Niedersachsen retail trade training centre in Springe. The participants came from various Member States and were not only interested in the problems of vocational training in the commercial sector, but were actively involved in them.

The object of the seminar was to treat issues related to adult vocational training from a practical point of view. The main themes discussed were group dynamics, didactics and methodology, motivation and systematic coordination of further education and continuing training. Although the wide scope of the themes prevented a definitive outcome, the results of the meeting were of considerable value, since apart from the variety of viewpoints expressed and practical examples cited, methods of systematization were found.

The size of the group made a division into work groups unnecessary. Thus the work was truly international and a split into language groups was avoided. The group was therefore able to form an effective integrated team meeting under optimum conditions for easy communication at both a professional and a human level.

To make the conduct of further working symposia possible the group is approaching the Commission of the European Communities with the request that they consider how a public platform can be created for this purpose. Thus the experience gained by the group would be made accessible to the European Community.

A report on the results of the international symposium of directors of commercial training centres is available in German. Translation of the report into other languages is currently under consideration.

112. Engineering education in Denmark

Introduction

In 1972 the Undervisningsministeriet (Danish Ministry of Education) proposed modifications in the training of engineers which resulted in a complete reappraisal of the old system. Since the new system has only been in operation for a short time, it is not yet possible to evaluate it and this report can therefore only describe its aims.

Higher technical education

Engineering education takes place in three types of institution:

- Teknikum
- Ingeniørakademiet
- Danmarks tekniske højskole

and there are four main lines of study:

1. building and architecture
2. chemical engineering
3. mechanical engineering
4. electrical engineering

The new system has been introduced to allow easier movement of students between the three teaching establishments.

1. The Teknikum

These are self-governing technical colleges, usually operated on a regional basis enabling the regional demands of engineering requirements to be met. They are financed directly by Undervisningsministeriet (the Ministry of Education), but exercise their own control over educational matters. The governing body is usually drawn from local industry, the trade unions and municipal offices. Admission to the Teknikum is granted on the basis of a certificate from an intermediate technical school (two foreign languages compulsory) and either one year's attendance at a workshop school followed by 15 months practical training or a recognized apprenticeship training of three years.

The course lasts four years, the first year being a foundation year when general subjects such as mathematics, physics, chemistry and a foreign language are taken. The remaining three years are spent studying mathematics and physics and specialist engineering topics, depending upon the branch of engineering chosen. 785 technicians graduated from the Teknikum in 1969, and 1078 in 1971.

2. Ingeniørakademiet

There is only one technical academy in Denmark which is financed by the Undervisningsministeriet. The governing body — the Konsistorium — is made up of academic, technical and administrative staff as well as student representatives.

The Akademi has four main departments:

1. mechanical engineering
2. civil engineering
3. electrical engineering
4. chemical engineering

Each department operates as a self-contained unit, having little or no contact with other departments. Business studies are usually taught by people from industry. A minimum of research is carried out, but many lecturers use their course material to write textbooks for sale to the students. It is planned to reduce the staff/student ratio from 1:6 to 1:2.

The entry requirement is a higher secondary school leaving certificate (studentekskamen), and in certain cases experience in industry is necessary. The course duration is three years, including six months in industry. Each academic year has two terms and each term is divided into 16 weeks of lectures, 4 weeks of intensive laboratory work and 2 weeks of examinations. The student usually has 20 lectures and 10 hours of laboratory work per week. The first two years of the course share a common curriculum; options are available in the final year. The major topics in the course are mathematics, physics and selected engineering subjects.

Examinations are taken under the supervision of the academic staff, and
the levelling of standards is brought about by using external examiners and representatives from industry. Students failing an examination can resit it.

The final examination may be compared to a general British degree. The number of graduates in 1969 was 208 and in 1971, 288.

The final placement of the student after graduation is the responsibility of the student, and generally engineers from the Ingeniørakademiet do not appear to have great difficulty in gaining employment.

The students do not pay tuition fees etc., but have to buy their own study material and textbooks. Students support themselves partly by means of a government grant and partly by means of a loan. The loan is provided by the National Education Fund, and must be repaid within a certain period after graduation.

The recent changes in the higher education system allow a graduate from the Ingeniørakademiet to be given credits for this if he wishes to enter the college of technology (Danmarks Tekniske Højskole - DTH).

3. Danmarks Tekniske Højskole

The DTH is the only college of technology in Denmark and has been situated in Lyngby since 1959. There are approximately 3,000 students and over 550 scientific staff members, 140 postgraduate students and 600 technicians. The administrative organization of the Højskole is in a process of change. More non-academic staff and students will be represented on the Council in the Højskole which so far has comprised mainly academic staff. The University Chancellor is the Chairman.

Each of the departments will have a study committee with a structure similar to that of the main Council. The study committees will have the responsibility for allocating funds and appointing staff.

Each department has a number of subject divisions with a professor as the Head. He also gives lectures but is not necessarily involved in tutorials, etc., which are usually taken by other staff or research students.

The entry requirements are identical to those for the Ingeniørakademiet. Students graduating from the latter or the Teknikum can be admitted for a complete DTH course or for only part of it.

The course structure has undergone a radical change since 1972. The modifications aim at allowing the student to select a 'package' of subjects rather than adhere to one discipline only. The new structure is based on a credit-unit system and a degree is awarded when a student has gained 330 units. Each subject is divided into a set of courses, and each course is worth six units. Students on all courses are obliged to study four mathematics courses and three physics courses, giving a total of 42 credit units. The students must also gain an additional 36 units from other courses of mathematics, physics or chemistry. In addition, students have to undertake a major project (not necessarily an individual one), including the presentation of a thesis. This gives a minimum credit of 30 units. The student is expected to take an average of five courses each term and in the final examination the students gain the additional credit units required for the degree.

The academic year is divided into two terms, and each term is subdivided into a lecturing period of 14 weeks, an examination period of 2 1/2 weeks and an intensive laboratory period of three weeks. The mornings are normally spent in lectures, seminars, etc., and the afternoons in laboratories and drawing offices. During the laboratory period, the students devote their entire time to exercises in design and complex experimentation. Examinations are set internally and students are allowed to resit them if necessary. This could, however, lead to a lengthening of the course duration.

Courses in single subjects are also offered for people in industry who completed formal education some years ago. Research undertaken by the DTH is mainly applied, as opposed to pure. Much of it is sponsored by industry, although the government is the main source of the DTH's income. Similarly to students at the Ingeniørakademiet the DTH's students can obtain government loans to finance their studies. Little or no advice is given at the institution as regards employment prospects.

Professional bodies for engineers do not exist in Denmark. This may be due to the fact that everyone knows everyone else in this particular field and relationships between learned societies and institutions therefore exist on an informal basis.

Conclusions

So far, the reaction to the changes in technical education has been mixed, varying from a welcoming acceptance of the freedom of choice for students to a generally negative reaction.

The opportunity given to the students to choose their own subjects has resulted in great administrative problems. Moreover, the increased representation of students and non-academic staff on the Council has not been favourably received by the academic staff. It is, however, too early to offer constructive comment on the new system: suffice it to say that the three-tier system of the Teknikum, the Ingeniørakademiet and the DTH appears to be suitable for the needs of Denmark.

Sources:


113. Education budget policies in the Netherlands and Belgium

The Netherlands

It is envisaged that education in the Netherlands in 1977 will cost some FL 18,200 million, according to the
Gradually there will be a limited number of chairs at the former higher level and a far greater number at the new lower level. The retirement age for professors and senior lecturers is to be lowered from 70 to 65. The starting salary for young academic staff is to be lowered in line with that of government staff and there is to be a general tightening of the criteria governing the functions of university positions. These budgetary measures are, for the most part, dependent on the natural turnover of staff and savings will therefore only occur gradually. They should not result in any loss of jobs, in fact the number of jobs in the academic field is to be increased by 415 in 1977.

During the course of the year the minister hopes to see various laws and rulings formulated and proposed. A draft law is planned for the formation of a single primary school for four to twelve year olds and at present experiments are being carried out in 30 schools. The Innovatiecommissie Basisschool (Primary school innovation committee) has suggested plans for broadening the number of schools taking part to a maximum of a hundred for the year 1976/77, whereafter a rapid increase of about five hundred schools per year can take place. Suggestions will be put forward concerning closer collaboration between higher vocational education and university education as well as a draft law on the financing of studies.

The Minister van Onderwijs en Wetenschappen (Minister of Education and Science) has approved the Middle School experiments, in which 45 schools will be concerned this year. These schools will receive extra facilities and subsidies for the duration of the experiment. Furthermore, an investigation is to be set up into the problem of the brugklas (the first class of secondary school preparatory to making a definite choice of course).

From 1 August 1977 the m.a.v.o. — middelbaar algemeen voortgezet onderwijs (intermediate general secondary education) project will begin. Preparation for this involves eleven schools. The aim of the experiment is to integrate the three-year m.a.v.o. course with the four-year course, making them both of four years duration.

In addition to this the project aims to introduce a new final examination system, whereby each examined subject is taught on two levels. A commission is to be set up to advise on methods of carrying out the above. It is also planned to broaden the sphere of intermediate vocational education to make it available to all pupils with a l.b.o. (lower vocational education) diploma as well as those with a m.a.v.o. certificate.

Three open school pilot projects are scheduled to begin in September 1977. The aim is to develop new forms of teaching adults, using their practical and general experience, during an experimental period of two years. A board will be set up to monitor the projects.

The number of students on the new teacher training courses has risen dramatically from approximately 4 200 in 1973/74 to nearly 10 000 in 1976. In 1977 a broadening of subjects will take place at some institutes.

The minister also mentions a number of other provisions in the budget with a view to both furthering a new education system and effecting savings.

Belgium

In Belgium a number of measures for savings in the education sector for 1976/77 were put forward in the summer. Among them are included the following:

— the total number of lessons in each school supported or subsidized by the State must remain the same as in 1975/76 in the fields of secondary and higher education, except in those schools whose number of pupils rises by at least 10% per grade or cycle. The Government has repealed the rules for splitting classes in secondary education and has applied new rules on splitting and grouping to technical and higher education

— the Government intends to limit additional jobs, overtime and posts in education for social advancement in an effort to absorb the unemployment among teachers
school-fees are to be charged to foreign pupils and students in Belgian schools whose parents are not domiciled in Belgium, and the Government is restricting the allowances granted for the travelling expenses of handicapped children

study grants and credits are also affected; the former are to be frozen, the latter to be decreased

the expansion of career guidance activities is to be halted

discussion is also taking place on the introduction of a fixed entry system for teacher training colleges and training for certain para-medical professions.

Sources:

Forum No 14, 15 September 1976.

114. Action programme for education in the European Community

The Communities' activities were extended to an important new field following the adoption by the Council of the European Communities and the Ministers of Education meeting within the Council of a Resolution comprising a first action programme in the field of education of 9 February 1976. This Resolution also provided for the establishment of an Education Committee consisting of representatives of the Member States and of the Commission, with the Chairman being drawn from the country currently holding the office of President of the Council. The Commission has the task of implementing the programme at Community level. The Education Committee coordinates and oversees its implementation. The Education Ministers will meet regularly to review progress and establish future guidelines.

The programme comprises a number of important actions in the field of education and distinguishes carefully between those which are to be implemented by the Member States themselves, and those which are to be implemented at Community level. The principal areas of action are the provision of better facilities for the education and training of nationals and the children of nationals of other Member States of the European Communities and of non-member countries, i.e. migrants and their children, the promotion of closer relationships between educational systems in Europe, the compilation of up-to-date documentation and statistics on all aspects of education in the Community, cooperation in the field of higher education, the teaching of foreign languages and the achievement of equal opportunity for free access to all forms of education.

The Ministers identified as the overriding priority area for action to be taken at Community level, measures to be taken in the field of education to prepare young people for work, to facilitate their transition from study to working life and to increase their chances of finding employment, thereby reducing the risks of unemployment, and the provision, in the context of continuous education and training, of further education to enable young workers and young unemployed persons to improve their chances of finding employment.

A report on this priority action, undertaken for the Commission by a group of experts from the Member States, was completed recently and this, together with a Resolution relating to action to be taken at Community level and by Member States themselves on the recommendations of this report, were being considered at a further meeting of the Council and of the Ministers of Education Meeting within the Council on 29 November, 1976.

With regard to the other areas for action identified in the Resolution of 9 February 1976, work by the Commission, in close liaison with the Education Committee and in collaboration with the Member States has made significant progress. A series of pilot schemes has been set up. Two of these (in Limburg and Leiden) are concerned with the reception of migrant children, two (in Bedford and Paris) with the teaching of the mother tongue and culture, and two (in France and Germany) with the training of teachers especially involved with the education of migrant children.

In order to enable the education sector to make a full contribution to the development of the community, the ministers committed themselves to a much more intensive exchange of information and comparison of policies and experiences in each Member State. Study visits for local, regional and national administrators will be organized. The first took place in Aarhus, Denmark, from 9 to 12 November 1976. They also undertook to give a boost to the European dimension in teaching and learning. Member States will organize short study visits and exchanges for teachers and pupils and have agreed to strengthen national advisory services involved in mobility and exchange.

In higher education a number of measures will be taken to promote cooperation between institutions. These will include the strengthening of links with and between organizations representing higher education institutions and a scheme of Community grants for the development of joint study programmes between Institutions of higher education in different Member States, launched earlier in the year. Grants made under this scheme are intended to foster the development of courses of study which are planned jointly and provided by two or more institutions in different Member States, whereby students following the course spend a recognized part of their period of study in each of the Institutions concerned, or where parts of the course in each institution are provided by members of the staff of the other institution or which include an element in the discipline or area of study concerned, that is related to the development of the European Communities.

A parallel scheme of grants for the support of short study visits by teaching and administrative staff and researchers in higher education is expected to be launched early in 1977. This scheme is intended to foster the development of co-operation in the field of higher education by increasing contacts between higher education institutions, by enabling individual members of teaching, administration or research staff to study specific aspects of the organization and administration of different higher education systems in institutions within the Community and the organization and methods of teaching and research in other institutions. Such
visits would normally be of 4 to 6 weeks duration and involve institutions in more than one other Member State.

Ministers were also concerned about problems now being encountered in several Member States, arising out of current policies of admissions to institutions of higher education, and agreed to arrange a discussion involving representatives of higher education institutions, about these problems.

The teaching of foreign languages was regarded as a vital area, since it provides one of the essential tools to integration, namely the ability for every citizen of the community to communicate. All pupils should have the opportunity of learning at least one other community language, and before qualifying as foreign language teachers, students should have spent a period in a country or region where the language they are to teach is spoken.

In addition, the Member States have been asked to report to the Council of the European Communities on problems relating to the introduction of a standard school record card, on the pattern recently adopted by the Council of Europe, and on difficulties inhibiting the free movement of teachers between the Member States. Of particular importance in the latter item is the question of preservation of pension and seniority rights when moving from one Member State to another.

The first edition of a student handbook on the various systems of higher education in Member States and on sources of information concerning courses available, costs, admission requirements, qualifications awarded, etc. will be published in 1977.

In the area of documentation and statistics, the Statistical Office of the European Communities was asked to compile data on more aspects of education than had been covered in the past, and the Member States are to try out the procedures involved in the computerised European Documentation System of Education (EUDISED), which has been developed by the Council of Europe.

The programme represents a major development in a number of key areas in education, but the fundamental importance lies in the political commitment of the governments of the Nine to include, henceforward, education as an element in its own right within the framework of the Community.

Taken on its own the education action programme represents a significant step forward, but taken in the light of the growing importance of the European Parliament, which has always been keenly interested in education affairs, it assumes major importance in the further development of the European Community.

Source: Bildungszentrum des Einzelhandels Niedersachsen.

115. Higher education in the Netherlands and the UK

The proportion of school-leavers in the UK gaining one or more A levels has dropped in the last two years, but of those gaining passes, four fifths had two or more. A level students are increasingly opting for a mixture of science, particularly social science, and arts.

In the five years up to 1974 about one in five school-leavers went directly into full-time further and higher education, although there was a drop in the number entering teacher training. The number of full-time students in British universities has increased in the past five years by 20% to about 280,000. This is, however, still some 8% below the demand envisaged by the Government in 1972. This has not been due to financial reasons but to the decline in numbers staying in secondary education beyond the minimum school-leaving age. This decline has also affected non-university higher education.

In the Netherlands, however, there is a continuing increase in demand for higher education. The Government hopes to allow entry to higher education to all those suitably qualified and not just to a limited group. The subsequent increase in numbers will result in differences of talent, intent and motivation, which the Government sees as a call for a change in the structure of higher education, outlined in their memorandum 'Hoger onderwijs in de toekomst' (the future of higher education).

The Government is endeavouring to ensure that a growth in the number of entrants goes hand in hand with a decrease in the average cost to the state per student. To help achieve this universities and colleges will have to make considerable retrenchments in the amount allotted to salaries (see item ). A system of natural wastage is also to be applied, whereby vacated posts will no longer be filled. Despite this, however, the law enabling a fixed entry limit to be put on certain university and college courses has had to be extended by two years until 1 September 1979.

In the United Kingdom the Government has rejected nearly every proposal made by the House of Commons Expenditure Committee on post-graduate education. The Committee had recommended that post-graduate education should be made more responsive to the needs of the economy and the need for trained personnel and that students should be encouraged to take up employment before any further study. The Government feels, however, that a move towards more vocationally oriented courses is already happening to a sufficient extent not to merit intervention, and points out that the number of post-experience students has already risen considerably. Due to the rapid changes in demand in particular fields and the length of time between starting training and taking up employment, it would be unrealistic to expect a close match between supply and demand. Any attempt to match the output of post-graduate students to specific job demand should therefore merely be a starting point.

The Government rejects the idea of the replacement of grants by a loan scheme as it would not achieve worthwhile savings.

Sources:
In a recent statement on British education policy the Prime Minister expressed concern over education standards in Britain. The basis of the statement was formed by a memorandum presented to the Prime Minister by the Department of Education and Science (DES).

One of the major proposals included in the memorandum is the introduction of a common-core curriculum of basic subjects to be taught in all secondary schools. Such a proposal would end a period of 100 years of non-interference in State education by the Government. The background to this proposal lies in criticism from employers that proficiency among school leavers in the use of English and in basic mathematical skills is often lacking.

In addition to this the situation now exists where some schools allow 13-14 year olds to choose their own curricula, frequently with the result that they opt in numbers insufficient for the country’s needs for scientific and technological subjects.

At present secondary school pupils may be entered for either the Certificate of Secondary Education (CSE) or the General Certificate of Education (GCE). CSE examinations are intended for candidates who have completed a five-year course of secondary education and examinations are set by Regional Examining Boards based on curriculum prepared by teachers serving on subject panels. In addition to this the boards examine externally on the basis of curricula prepared by individual schools or groups of schools and they may also moderate examinations prepared and marked by schools themselves to ensure reasonably comparable standards. All three kinds of examination qualify for the Certificate.

GCE examinations, which are of a higher standard than those for the CSE, are conducted by eight independent examining boards and they are set at two levels, Ordinary (O) and Advanced (A). The normal age for entry for O level is 16, although there is no upper limit and it may be lower if a school feels that it is educationally desirable. A levels are usually taken two years after O level.

For the CSE schools enter pupils for examinations set by the board for the region in which they are situated. For GCE examinations, however, arrangements are made between each individual school and the examination board of their choice.

Thus the curricula set by schools are for the most part determined by examination requirements but they will vary from school to school depending on the type of examination held and on the examining board which has set the examination. Curricula for the two or three years preceding the start of O level or CSE syllabuses in secondary schools are left to the discretion of each school.

Introduction of a common-core curriculum would therefore entail a number of changes, but despite this the Prime Minister has said that there is a strong case for such a curriculum. The memorandum prepared by the DES indicates that models for core-curricula are already being prepared although the Department is cognizant of the problem of securing acceptance of this new idea by local authorities and in schools.

Sources:
Times Educational Supplement, 15 October 1976.
The Times, 19 October 1976.

117. Examination systems reviewed in France, Denmark and Ireland

France

The examination system in France comprises three types of examination:

— entrance examinations, giving access to the Grandes Ecoles (colleges of university level, which specialize in professional training) and used in the recruitment of civil servants and public service officials;

— end-of-year examinations, taken to gain promotion to a higher class or entry to secondary education;

— examinations resulting in the award of a degree or diploma.

Of these, examinations related to degree or diploma courses are the most common.

The changes which have been introduced into the French system give evidence of the close link between innovations in teaching methods and syllabuses and new developments in examinations.

Examinations are traditionally taken at the end of a school or university year or a course, but their nature has been modified considerably. The principal modifications are as follows:

— examination topics chosen by the examiners more frequently bear a close relationship to everyday life, providing a more solid and practical approach;

— academic exercises are being replaced by project work or oral examinations with a panel of examiners;

— the introduction of a system of options which allows candidates to choose topics which interest them or which are most appropriate to their future careers.

Continuous assessment whereby examinations are taken at intervals throughout the course has also been introduced in France. Similarly, credit-unit systems are in operation in higher education and in certain adult education courses. Under these systems students are awarded credits throughout the course and receive a diploma when they have gained a sufficient number of credits. Such systems have a number of advantages over traditional examining systems. For example, they restrict the role which chance and nervous tension play in final or end-of-year examinations and many adult trainees are motivated by them, as they allow them to set their own pace and keep a check on the knowledge they gain. Used in voca-
tional training, credit-unit systems lend themselves to the development of a close relationship between initial training and continuing vocational training, and there is obviously room for such systems to be implemented over a wider range of courses.

The theory of teaching by objectives will clearly influence final examinations. If examinations are designed for courses whose content is defined by certain learning objectives, they will probably reach several disciplines.

It should be noted that an exchange of ideas and experiments between France and Germany regarding credit-units is taking place at the present time (See Issue 3/76).

**Denmark**

Changes taking place in the form of examinations in Denmark are comparable to those in France. Most examinations are still based on traditional methods of testing the pupil's ability to learn by heart, but methods of assessing his ability to use the subject-matter of his lessons to solve concrete problems are now also being used.

In engineering and business training, examinations are generally of a traditional nature. However, on completion of their training, apprentices are required to present a test work-sample which is evaluated by a panel of examiners drawn from the relevant trade. There is no compulsory examination at the end of erhvervsfaglig grunduddannelse (basic vocational training), an experimental training scheme. The trainee receives a certificate stating that he has completed the course.

According to the new Folkeskolelov (primary school law) which came into force in August 1976, primary school examinations will be abolished. (See Documentation). This means in effect that examinations can no longer be used to determine whether a pupil can progress to a higher class in the primary school system but a pupil wanting to continue in the higher secondary school will still have to pass certain tests.

**Ireland**

In the field of general secondary education, the recent development of curricula as instruments towards the attainment of certain educational objectives has led to changes in the emphasis and style of State examinations. Questions are framed to test acquired skills other than recall of facts or methods. This has led to research first into curricula and more recently into assessment methods.

With a view to relating the format of questions to the candidate's environment and field of experience, at Junior Cycle (lower secondary) level, taped material has been introduced for examinations in music and French, pictorial representation for questioning and answering in science subjects, history, etc., and short answer and multiple choice questions for certain subjects. Special trial examinations have also been proposed a this level for 1976 to cater for a number of curriculum development projects in science, the humanities and environmental studies. These projects emphasize the interdependence of subjects and moves towards integration of syllabuses.

The Intermediate Certificate of Education - ICE (15-16 years) was the subject of a report commissioned by the Minister for Education which was published in September 1975. It recommended that the present system of external examinations should give way to a continuous school-based assessment, supported by external moderation and nationally normed objective tests and that to this end a Moderation and Educational Assessment Service should be established.

Recent efforts towards improved training methods in technical, business and technological education have also led to a consideration of testing methods. Continuous assessment and project-work play an important part, for example in testing apprentices and technician and middle management trainees. The National Council for Educational Awards wishes to encourage innovation in assessment, in particular through a pilot scheme in objective testing. Under a new scheme for apprenticeship released by the Council of AnCO in October 1975, there is in principle a system of compulsory testing and certification of apprentices.

In colleges modular courses have been introduced whereby students are awarded diplomas or degrees by the credit-unit system. The standard of these diplomas depends on a cumulative average of the quality of the credits awarded.

118. **Short news**

**Europe**

An agreement over the harmonization of medical studies has been reached between the University of Rennes in France and the Friedrich-Alexander University in Erlangen-Nürnberg. A student at either university who has reached a certain required level (to be determined by both institutes) may continue his studies at the other for a maximum period of one year or two continuous semesters. If this arrangement is successful a similar agreement is envisaged in the departments of chemistry and mathematics. Authorities in France and Germany are currently investigating ways in which recognition of the medical studies agreement can be extended to all universities in both countries.

**Source**: Overzicht, September 1976.

**Federal Republic of Germany**

The number of participants in adult vocational training schemes including further education, retraining and induction schemes, has risen sharply since the introduction of the Arbeitsförderungsgesetz (work promotion act). A report on the success of the schemes, which have contributed to a reduction in structural unemployment, has been published by the Institut für Arbeitsmarkt- und Berufsforschung (Institute for occupational and labour market research).

The question of whether vocational training should be exclusively company-oriented is discussed in a paper.
issued by the Friedrich-Ebert-Stiftung (Friedrich-Ebert Foundation). This paper expresses the view that training should be 'autonomy-oriented', i.e. training should equip the craftsman to play a fuller role in his working environment and be more adaptable to change. He proposes that only 50% of training content should be job specific and that a range of technical, social and learning skills should also be transmitted.

Sources:
Zehn Thesen zum Thema 'Berufsbildung ausschliesslich untemehmensorientiert'? Friedrich Ebert Stiftung. Bonn.

France

A recent study has been carried out by the Institut Français d'opinion publique (French Institute of public opinion) assessing the status of continuing training four years after the introduction of the law of 16 July 1971. The study was undertaken at the request of the Secrétariat d'Etat aux Universités (Secretariat of State for the Universities). Included in the timetable are surveys on the training of apprentices, the continuing training of civil servants in 1976 and 1977 (already in progress), bilateral and multilateral agreements concluded with institutions controlled by the Ministry and the Secrétariat, training centres subsidized by the Ministry of Education and State-approved centres.

Sources:
Circulaire No 76-233 of 19 July 1976.

Netherlands

There is a threat of a shortage of chemical engineers after 1985 in the Netherlands because not enough students are entering the field of chemical technology. The reason for this is probably the alarming reports in previous years of large unemployment in this field. In 1976 the demand for chemical engineers trained in HTS's — (senior technical school) was 285 but there was a supply of only 150 graduates.

A three-day French-Dutch symposium on vocational training was held in Zandvoort in October. Representatives of both ministries of education, as well as representatives from vocational training institutes and schools in both countries, took part. The symposium was a result of the French-Dutch cultural agreement whereby exchanges have taken place and projects have been carried out by certain French and Dutch twinned schools. Future symposiums will be organized every two years.

Sources:

United Kingdom

In September 1976, a new bachelor degree course in education with educational broadcasting accepted its first intake at Stockwell College of Education. This modular three-year course aims to teach the facts and skills to equip future educational broadcasters to take full advantage of technological innovations in the field of radio and television. Main elements of the course are educational theory and practice, professional studies and film and television studies; the student must also complete a unit of another subject such as drama, English, history, music or art.

Following the record 52,000 applications over the past two years for places at the Open University the number dropped in 1976 to just under 50,000. This drop may be attributed to the rise in tuition fees from £25 to £40. However, despite the reduced number of applicants 3,000 more undergraduates have been admitted in 1976 than 1975 as a result of the need to counteract the high drop-out rate of both new and continuing students and thus keep the Open University cost-effective. In all, 20,000 new students have been accepted for courses beginning in February 1977. At 1976 prices the average cost to the student is reckoned at £600 for an arts student and £900 for a science student.

Sources:
The Times, 13 and 23 August 1976.
DENMARK

NEW LAW ON COMPREHENSIVE SCHOOLS

On 1 August 1976, the beginning of the school year, the new law on the folkeskole (schools for 7-15 year olds) came into force, superseding the 1958 law.

The main feature of the new law is an undivided school, as opposed to the system under the old law whereby comprehensive school classes were split into two levels after seven years.

All pupils are now taught together until they have completed their ninth compulsory school year. After this the possibilities for continuing in education are either a further year in the folkeskole (10th class) or transfer to the three-year high school.

From the 8th to the 10th year certain subjects are taught as two courses with different syllabuses.

These subjects are arithmetic/mathematics, English, German and physics/chemistry. It is up to the individual pupil to decide which course he will follow.

The situation no longer exists where failure to pass tests allowing promotion to a higher class involves repeating a year in the same class. Leaving examinations are no longer necessary at the folkeskole, but it is still possible to sit the examination and acquire evidence of having passed it.

Provided broad-based education has been followed up to and including the 10th class, the broad-based examination can be taken in the abovementioned subjects. Tests after the 9th class are continued, regardless of whether the pupil has followed the foundation course or the broad course and, as previously mentioned, they are voluntary.

The abolition of examination requirements in the folkeskole forms part of the attempt to allow admission to the high school to all those who wish to continue their education there. Instead of giving marks it is considered preferable to attach importance to a report from the school on the pupil's suitability to continue secondary education, as well as to the pupil's and his parents' own wishes and assessments.

However, there is still a demand for evidence of having passed the folkeskole exam for entrance to the high school.

In the current parliamentary session two proposed amendments to the gymnasieskolov (high school law) are under discussion – one amendment having been proposed by the government and the other by the opposition.

FEDERAL REPUBLIC OF GERMANY

THE RESTRUCTURING OF HIGHER EDUCATION

In May 1976 the Wissenschaftsrat (academic council) formulated recommendations on the capacity and structure of higher education based on estimates that by 1983 the number of higher education applicants will be 274,470 — an increase of 71% over the 1975 figure. Even if the number of student places available is increased to 850,000 as planned, the tertiary sector will be subjected to considerable staffing and structural pressures.

The Wissenschaftsrat therefore recommend the introduction of both long-term structural improvements and temporary measures in order to assure every young person of adequate training or educational opportunity. However, even if sufficient training provision is made, vocational opportunity for graduates will be modified because of the increase in their numbers.

Proposals include the following:

— existing courses should be reorganized.
— the revised courses for the Fachhochschulen (technical colleges) should be of a modular nature and course length should be a maximum of three of four years, depending on the type of course. As a temporary measure, financial incentives should be introduced to encourage students to complete their studies early.
— university courses should be vocationally relevant. New courses, for instance at the Pädagogische Hochschulen (teacher training colleges), should be designed to give students maximum vocational and educational opportunity and vocational flexibility.
— where there are pressures on the higher education programme, a quota should be fixed on the number of students taking second degrees and following post-graduate courses, and an adequate research programme should be maintained.


STUDENT COUNSELLING

Since the end of the 1960's growing importance has been assigned to counselling services in schools and universities. At a meeting in June 1976, the Westdeutsche Rektorenkonferenz (Conference of University chancellors) formulated recommendations on the content and form of student counselling services and on the training of student counsellors.

Preliminary surveys at universities show a need to intensify these services, and their functions have been identified as follows:

— guidance throughout upper secondary education should give the young person information about opportunities in higher education and training, including course content and entry requirements and should give advice to unsuccessful university applicants.
— induction guidance should acquaint the new student with the structure and organization of the university, its facilities and welfare services and advise on study techniques.
— counselling throughout the university course should give the student advice on academic problems, course choices, learning and working difficulties, examination problems, changing courses and terminating studies.

The universities consider that in addition to having followed a higher education course prospective counsellors should have had some work experience and that the supplementary training required could be provided during the Referendarausbildung (practical training period before the second State examination). Student counsellors should be reorganized so that application of continuous assessment is more widespread.

— a planning and preparation procedure should be set in motion to organize further measures and experimental shorter courses should be set up in universities.
— the implementation of the structural reforms under the Hochschulrahmen­gesetz should be planned in three steps:
   (a) any necessary amendment of laws
   (b) development of shorter courses, including preparatory and post-qualification courses
   (c) securing of the means to set up the new courses throughout the Länder.

The Wissenschaftsrat believe that if the above measures are introduced by 1980, higher education will be available for every adequately qualified person for the next ten to fifteen years. However, any further delay will cause difficulties, since training opportunities outside the tertiary sector will not be able to cope with the consequential increase in demand.
sellors should be available for each group of subjects as far as possible in a ratio of one counsellor for every 1,000 students. Theory, practice and further training should provide the student counsellor with the following:

- an understanding of the education system
- continually up-dated information on university admissions
- an understanding of the student counselling services
- basic instruction in educational psychology
- an introduction to didactics and counselling methods
- opportunities for practical counselling work.

Although some education degree courses contain elements designed to equip teachers for counselling work, school teachers who work in an advisory capacity for about five hours per week face problems arising from their conflicting roles as disciplinarians and friendly advisors. In-service courses have been devised in some of the Länder and the Deutsches Institut für Fernstudien (German Institute for Distance Education) is producing a distance education course for these teachers advisers. The Kultusministerium (Department of Education) of North Rhine-Westphalia has set up a committee to draw up a new plan for counselling in its schools. Counsellors engaged by the Bundesanstalt für Arbeit (Federal Institute of Labour) to give advice to graduates and school-leavers with university entrance examinations must be graduates. The additional knowledge needed for this work is gained during the initial induction year.

Sources:
Informationen No 34, 25 August 1976.

FRANCE

MODIFICATIONS TO THE NATIONAL INTER-VOCATIONAL AGREEMENT OF 9 JULY 1970

Six years after the introduction of the inter-vocational agreement of 9 July 1970 on vocational training and retraining the social partners have decided, on the basis of experience gained over the last few years, to improve those provisions relating primarily to the exercise of employees' rights to paid educational leave and to the role of the works council in the formulation of training policy.

Under the terms of an additional agreement of 9 July 1976 conditions governing eligibility for paid educational leave are now relaxed so that the sole condition now to be fulfilled is that employees must have spent a minimum of two years with the firm.

The minimum time period between two stages (training courses) is reduced from one year to six months and the maximum period is reduced from twelve to eighteen years. The new provisions distinguish between those employees following courses as a result of a decision made by the employer and those on courses by their own request: henceforth the regulation concerning the time period between courses will not apply to the former while only the latter will be taken into account in calculating the 2% of employees who may be absent from their firm at any one time.

Financial provisions for paid educational leave have also been modified. Courses approved by the commission paritaire de l'emploi (joint employer/employee committee) will be of two types: short courses of less than 500 hours and longer courses of more than 500 hours. For short courses employers are obliged to continue paying participants for the first 160 hours of the training but in addition to this employers must pay participants and allowance i.e. an amount equal to 2/3 of their training expenses, but in any case not less than FF 32 and not more than FF 50 per hour. For courses of more than 500 hours employers are still obliged to pay participants for the first 500 hours or first 13 weeks of the training.

The number of beneficiaries of the above provisions who may be simultaneously absent from a firm is limited to 0.5% or 0.75% in the case of the beneficiaries being managerial staff.

Under the provisions relating to the role of works councils, not clearly defined in the 1970 agreement, it is stated that works councils will consider training plans while at the same time they must be kept informed on the progress of those plans implemented. Thus the councils will maintain their consultative role and no powers of decision will be invested in them.

Sources:
Formation Professionnelle, Bulletin de Liaison No 3, August 1976.
INFFO Flash No 5, 28 July 1976.

LINGUISTIC TRAINING FOR MIGRANT WORKERS

One of the objectives of an interministerial circular issued on 22 October 1975 was to improve training measures in the field of linguistic training. A chief priority was to establish a training policy for migrant workers, as a knowledge of the language would help integrate them into society and increase their chances of gaining access to vocational training in the host country.

The present circular, issued on 14 May 1976, outlines recent Government measures in this field and gives the following objectives for a linguistic training policy:

- to eliminate illiteracy within a period of 8-10 years
- to double present efforts being made in this field within two years
- to increase opportunities for in-company training which will be credited as working time
- to improve and increase existing teaching methods and materials.

New measures will also be drawn up in an attempt to reach a more specific public, such as women, the handicapped, the unemployed and young people.

One measure which has already come into force as a result of the uncoordinated nature of previous training efforts is the establishment of a commission set up by the Secrétariat d'État aux travailleurs immigrés (Secretary of State for migrant workers). The commission which is financed by the Social Action Fund groups together both public and private training bodies in an effort to build the training machinery around a training policy. Prefects in each region will ensure that the harmonization of measures takes place.

A body which deals specifically with the education of foreigners is also in existence — l'Amicale pour l'enseignement des étrangers — AEE (Society for the Education of Foreigners). The Society is linked closely with the State and its objective for 1976 was to establish a programme of new measures with the aid of other training and research bodies.

In addition to the initiation of the measures the délégation à la formation continue (district representative for continuing training) will devote a section of his yearly report to the training of migrants. This section will outline certain aspects of the proposed measures, such as the conditions necessary for their realization, the relevant training bodies involved and priority areas.

Source:
Circulaire No 76-183, 14 May 1976.

INTRODUCTION OF NEW VOCATIONAL TRAINING MEASURES

In a Decree of 9 September 1976 urgent new vocational training measures defined by the comité interministériel de la formation professionnelle et de la promotion sociale (Interministerial Committee for Vocational Training and Social Promotion) were introduced by the Secrétaire d'État auprès du Premier Ministre chargé de la fonction publique (Secretary of State for Public Affairs).

The Secretary of State sees vocational training as an answer to employment problems, and his chief objective is to continue and improve upon work which has already been carried out in this field. Some of the measures which he has outlined include:

- the improved coordination between the various Ministries concerned with vocational training and the development of a joint vocational training policy.
— the simplification of administrative procedures
— the adaptation of a policy which takes account of present economic and social realities
— the establishment of equality between different grades and types of training.

In addition to these measures, the Secretary of State will ensure that legislative and contractual provisions are satisfactorily concluded, and he hopes to improve and develop coordination between administrative bodies and harmonization with representative organizations on both a regional and departmental basis.

These measures should thus reassure the public that the French Government is taking an active interest in problems of vocational training.

Source:
INFFO Flash No 8, 15 September 1976.

THE NETHERLANDS

DRAFT LAW ON PRIMARY EDUCATION

The Dutch Minister van Onderwijs en Wetenschappen (Minister of Education and Science) has outlined the six main points of the draft law on primary education. These are as follows:
— it provides the framework for a single school for four to twelve year olds which allows an uninterrupted development process
— it breaks through the system whereby a set amount must be covered in each year and it creates a better understanding between the individual differences of each child
— it broadens the objectives of primary education to include not only the acquisition of knowledge, but also the development of creativity and of cultural and social attributes
— it encourages the democratization of schools and the increase of parent participation
— it means better planning and thus a more practical distribution of education provisions
— it improves the system of costing in primary education.

In addition to the above, it is intended to lower the compulsory school age to five when the new primary school is introduced. There will also no longer be any distinction between infant and junior school teachers.

Source:

ADVISORY COMMITTEES ON THE FURTHER TRAINING OF TEACHERS

On 14 September 1976 the Minister van Onderwijs en Wetenschappen (Minister for Education and Science) inaugurated the Adviescommissie voor de Nascholing voorbereid onderwijs en the Adviescommissie voor de Nascholing kleuter- en lager onderwijs (Advisory committees on Further Training in the infant, junior and secondary school sectors). The tasks of the committees are to advise on further training needs in secondary education and on the priorities of the further training plan to be drawn up by the minister. This is in conjunction with a memorandum on the further training of teachers which states that further training should aim to stimulate and make possible self-training, that it should be of a continuing nature and that it should be aimed at all educational activities within the school.

Problems posed by the memorandum and the advisory committees will be dealt with by the recently formed Werkgroep voor de uitwerking van de Nascholingsnota — WUN (working party on the application of the memorandum on further education), which, it is expected, will work in cooperation with the advisory committees.

Source:
This paper aims to illustrate the extent to which economic explanations account for private decisions to stay on at school beyond the minimum school-leaving age and go on to higher education. Aspects included in the study are: a consideration of the groups; and an assessment of the extent of the distribution and mobility of labour. The report also deals with the laws governing retirement and retention of pension rights. This report examines the various problems of redundancy, the ages at which people terminate their education; the differences between socio-economic groups; and an assessment of the extent to which economic explanations account for this pattern.

This report examines the various provisions for redundancy, retraining etc. in Western Europe following a country by country structure. For each of the nine Member States of the EEC plus Sweden it studies in more detail the general labour market situation, government policies and legislation in this field, including vocational training and retraining and the redistribution and mobility of labour. The report also deals with the laws governing dismissals and redundancies, their special conditions and provisions as well as unemployment benefit, severance pay, early retirement and retention of pension rights. For a further five countries a brief summary of the redundancy situation is given.

This issue is entirely devoted to vocational training regulations. The articles reflect the problems of the form and content of vocational training regulations, of their effect on the relationship between job structures and training opportunities, and the organization of special initial training courses for young people who have completed higher secondary education.

This publication is the result of two inquiries undertaken by the Centre Infno in collaboration with the Secrétariat d'Etat à la Formation Professionnelle (Secretary of State for Vocational Training). The first inquiry looks into the needs of those involved in providing training to custom- ers or organizations in other countries, while the second examines to what extent medium-sized firms are required to 'export' training. The findings of the two inquiries are presented in detail and examples of the questionnaires used are included. The report is concluded by suggestions on improved methods of adapting the supply of training in France to meet the demand from other countries.

This essay is linked with the project Modelle zur Berufsgenossenschaftsbildung (Models for basic vocational training), undertaken by the Bundesinstitut für Berufsbildungsforschung (Federal Institute for vocational training research). By systematic identi-
VOCA TIONAL GUIDANCE


In the new concept of guidance, priority is given to the subject who does not delegate decision-making and planning concerning his own future to experts (psychologists, sociologists, economists or educationalists) or to the group or the environment. This volume purports to illustrate the socio-cultural and dynamic aspects of guidance and also proposes operational techniques. It should be of interest to all those engaged in the guidance services.


This essay summarizes vocational guidance services in the FRO, especially the work of the Bundesanstalt für Arbeit (Federal Institute of Labour). The rigidity of the German training system is well-known and the author describes the machinery which has now been set up by the government at considerable cost to guarantee the individual a free choice of career, training institution and place of work. Information is also given on the kind of training, retraining and upgrading courses which qualify students for financial support and on how the vocational guidance and promotion services are financed.

EDUCATION IN GENERAL


This is a discussion of the problems of pupil motivation at school. Mr Elissen sees motivation as being influenced on three levels:

— the class situation (micro-level)
— the school organization (meso-level)
— social influence (macro-level)

Although these categories are basically autonomous they can influence each other. The difference is also pointed out between intrinsic and extrinsic motivation, i.e. learning for its own sake and learning to attain a goal. The article is concluded by a report of the debate which followed on the various points raised by Mr Elissen.

This special issue outlines various proposals for changing legislation and effecting certain improvements in the field of education which the department of education has now begun to investigate. The proposals are presented in the order in which they were submitted and are preceded by tables outlining the objectives and possible solutions to various fundamental problems.


This book looks at the sociological and practical difficulties of teaching children who are either bilingual or who speak a different language or dialect at home from that normally taught in their school. The author considers general aspects of bilingualism as they affect the speaker himself, those external factors which influence his use of language and the functions of languages in a country. These factors all determine the language teaching methods of bilingual schools.


CONTINUING EDUCATION


The last four years have seen a significant increase in the number of continuing training measures implemented in France. This is largely due to the introduction of appropriate legislation. During the course of the 6th Plan, one of the objectives of which was to double the number of training opportunities for those who had left the education system. This report also points out, however, that much remains to be done to ensure the increased participation of employee representatives in the development and realization of training policy.


This article explains the importance of compensation for under-privileged sectors of society. Based on the theory that success at school may lead to a successful career, and that family background may influence a pupil's performance at school, the initiative seeks to make provision for the under-privileged in the education system.


In this final report by the planning committee on adult and further education, set up by the Kultusminister (Minister of Education) of North-Rhine-Westfalia, are contained recommendations on the Bautenkastensystem (course unit system), on granting professional status to some further education teachers and on building adult education centres. The work of this committee is an important contribution to the integration of adult education into the overall education system. The first report was published in 1972 (See Item 40, Bibliography 1/74).

TRAINING OF APPRENTICES


TRAINING OF MIGRANT WORKERS


Under a Council of Europe award scheme skilled workers from countries where industrialization is limited are trained as trainers in highly industrialized countries. This report gives the final results of a four-month course to train 22 Turkish award-holders at the Berufsförderungszentrum (Vocational Promotion Centre) to work as instructors in Turkey. The courses, held in Turkish, included technical training and visits to German industrial firms, but was principally concerned with the pedagogical aspects of a trainer's work. A similar course has now been organized for Greeks and Cypriots.

TRAINING OF TRAINERS AND INSTRUCTORS

550. LITERATURÜBERSICHT ZUR AUS- UND WEITERBILDUNG VON LEHRKRAFTEN IN DER BERUFLICHEN ERWACHSENNABILDUNG (D). A bibliography for the initial and further training of instructors in the field of adult training, edited by Peter Mihm and Volker Preuß. Berlin : Bundesinstitut für Berufsbildungsforschung, December 1975. 57 pp.
TRAINING IN THE HANDICRAFT SECTOR


TRAINING IN MEDICAL AND PARA-MEDICAL SECTORS


TRAINING AND EMPLOYMENT


UNIVERSITIES AND INSTITUTES OF HIGHER EDUCATION


This report was commissioned by the Sec­retariat d'Etat aux Universités (Secretary of State for Universities) and deals with sandwich courses and their role in socie­ty. As many students and potential em­ployers feel that higher education is not fulfilling its proper function, which is to train people for jobs, sandwich courses are suggested as an answer to the problem. The report outlines how sandwich courses can bring about reform in the French education system, and how they help to integrate universities with society. Other topics include an introduction to the current problems in higher education, the aims of sandwich courses, the results of trial courses carried out, and propo­sals for putting the ideas into action.


In recent years there has been a dispro­portionate increase in the number of stu­dents taking up courses in agricultural and food sciences, compared with those com­mencing courses in other subjects. The author analyses this trend and his com­ments are extensively illustrated with de­tailed tables and graphs.

MASS MEDIA


TEACHING AIDS AND TEACHING METHODS


This book, which is directed primarily at trainee and practising teachers, discusses the possibilities and limitations of multi­
media teaching methods in the light of recent experience. Topics covered include the use of programmed instruction, the theory underlying teaching programmes, their preparation, and the possibilities which they offer for learner-centred instruction. Other aspects discussed are the integration of multi-media teaching systems into the overall teaching process, their economic benefits and their use in intensive learning situations.


This article is a summary of a world conference on computers in education held in 1975. The conference was to be seen as a forum for discussion, and a great variety of inter-related subjects were dealt with. Consideration is given to the social implications of education with computers and the use of computers for monitoring progress and guiding the education process (computer managed instruction).

568. FERNUNTERRICHT: INFORMATIONEN DES BUNDEsinstituts für Berufsbildungsforschung (D). Distance Education: Information from the Federal Institute for Vocational Training Research. Berlin: Bundesinstitut für Berufsbildungsforschung - BBF, 1975. Six sections. Cumulative. This loose-leaf binder produced by the BBF aims to promote distance education in the FRG. The material will be continually updated and the sections expanded. The binder includes details of BBF-approved distance education courses, a list of distance education institutes and a section devoted to articles on distance education, including one entitled 'Fernunterricht in der beruflichen Bildung' (Distance education in vocational training).


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