ABSTRACT

The sixth dispatch of T & D abstracts contains 42 abstracts of international scope which focus on education, training, and work patterns, and on training in rural areas. Brief abstracts are presented under the following headings: conferences and exhibitions, new policies, new institutions, management, research, training standards, agriculture, construction industry, transport, training systems development, methods and media, bibliographies, and for the bookshelf. In addition, 19 substantive international abstracts are presented with information on the author, title, bibliographical references, translation of title, subject analysis, and detailed content analysis. A list of periodicals that were abstracted is included. (EC)
How to file Abstracts

The abstracts of the first despatch are already filed in the binder when it is sent to you.

When you receive this despatch:

1. File the "News in brief" section under the yellow card marked 1.
2. File the abstracts marked T & D 2, 3, 4, etc. under the appropriate yellow classification card.

Comment classer ces Résumés

Les Résumés du premier envoi sont déjà placés dans le classeur que vous recevrez.

Pour l'envoi ci-joint:

1. Insérez les feuilles de la section "En bref" sous la rubrique 1 des séparations jaunes.
2. Insérez ensuite les Résumés marqués F & P 2, 3, 4, etc. derrière chacune des séparations correspondantes.
**Contents of this despatch:**

This sixth despatch of T & D Abstracts contains, in addition to 42 items under the section "News in Brief", 19 substantive abstracts.

**Education, training and work patterns**

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**Training in rural areas**

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**Enseignement, formation et structures de l’emploi**

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**Formation dans les régions rurales**

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Conferences, Exhibitions

TRAINING DESIGN - London, 11-13 November

The design and selection of management training courses was the subject of a seminar organised by the British Association for Commercial and Industrial Education (BACIE) from 11-13 November 1975 in London, United Kingdom. Given a statement of identified training needs, participants would be expected, at the end of the seminar, to be able to define training objectives in behavioural terms, draw up suitable evaluation measures and select appropriate training methods. The seminar was planned to be task-oriented and concentrate on group work.

Course Secretary (TD 13), British Association for Commercial and Industrial Education, 16 Park Crescent, London WIN 4AP, United Kingdom.

AUDIO-VISUAL AIDS AND DATA PROCESSING AS A SERVICE TO EDUCATION, Munich, 11-14 November

Representatives of educational, scientific, political and economic interests met for 4 days in Munich (German Federal Republic) to examine the possible future role of audio-visual aids and data processing in education and training over the next few years: what can be expected of these techniques, how to plan for and meet the requirements, educational policy and the problems of financing education. Statements by specialists provided the basis for group discussions and there was a parallel exhibition (non-commercial) of relevant materials.

Visodata 75, Münchener Mess- und Ausstellungsgesellschaft mbh, D-8000 München 12, Sessegelände, Postfach 12 10 09.

REGIONAL SEMINAR ON TRAINING ABROAD - Dakar, 17-24 November

Means of improving the effectiveness of training abroad for African nationals was the theme of a seminar organised from 17-24 November 1975, in Dakar,
Senegal. Organised by UNESCO the seminar brought together those responsible for the organisation of such training. Discussions covered: the selection of training programmes within the framework of national, regional and local development plans, follow-up and evaluation of training courses, measures to prevent the loss of trained personnel and suggestions to improve the structure and functioning of national services in charge of programmes of training abroad. Languages - English and French.

UNESCO, 7 Place Fontenoy, F-75700 Paris.

TRENDS IN TRAINING - Eastbourne, 3-5 December

"Approaches to the development of interpersonal skills" is the theme of a conference to be held from 3-5 December 1975 in Eastbourne, United Kingdom. Six leading companies will be describing their work in the area of interpersonal skills training and leading consultants will be speaking on transactional and behavioural analysis.

Conference Secretary, British Association for Commercial and Industrial Education, 16 Park Crescent, London WIN 4AP, United Kingdom.

1975 AVA CONVENTION - Anaheim, 5-10 December

The 1975 Convention of the American Vocational Association is being held from 5-10 December in Anaheim, California, United States. This year's theme is "Reaching out through vocational education". In addition to a comprehensive programme of optional lectures covering the major aspects of training, guidance and personnel questions there will be an exhibition of vocational instructional materials.

Convention Office, American Vocational Association, 1510 H. Street N. W., Washington D. C., 20005, USA.

AGRICULTURAL YOUTH PROGRAMMES - Quezon City, 9-18 December

The effectiveness of existing agricultural extension youth programmes in serving the children of small farmers and agricultural workers will be reviewed at a Seminar to be organised by the Food and Agriculture Organisation of the United Nations from 9-18 December 1975 in Quezon City, Philippines. Funded by the Danish International Development Agency the Seminar will discuss the special problems in reaching and serving this target group together with ways and means of strengthening services to assist this sector.
of the rural population. An attempt will be made to identify concrete measures that can be taken by FAO, particularly at the regional level, to introduce desired improvements. The working language is English.

Food and Agriculture Organisation, Via delle Terme de Caracalla, I-00100 Rome.

New policies

EQUALITY OF OPPORTUNITY AND TREATMENT FOR WORKERS - Europe

The 3rd Symposium on Equality of Opportunity and Employment in the European Region was held from 21-30 April in Geneva, Switzerland. The Symposium is one of a series of regional meetings organised under the ILO programme for the elimination of discrimination in employment. The agenda dealt mainly with problems relating to equality of opportunity and treatment for migrant workers. Equality of opportunity for women and older workers was also discussed. The report and documents will be published in booklet form by the ILO.

International Labour Office, CH-1211 Geneva 22.

RECURRENT EDUCATION - Europe

Recurrent education was the main theme of the 9th session of the Standing Conference of European Ministers of Education which was held at Stockholm (Sweden) from 9-12 June 1975. The 21 ministers of education attending the conference examined the points in favour of recurrent education and the problems inherent in introducing it. The ministers also considered multi-lateral European co-operation in education, the risks and advantages of having a plurality of frameworks for such action, and ways and means of ensuring better utilisation of available resources. The conference adopted three resolutions on: (1) recurrent education; (2) education for migrants; (3) international co-operation in the field of education.


SPECIAL ASSISTANCE FOR APPRENTICES - Australia

Declining apprenticeship intake and rising unemployment among young apprentices has resulted in new government action to support apprenticeship
and ensure long-term skill needs. The Government will significantly increase the training subsidies payable to employers for 1st-year apprentices under the National Apprenticeship Assistance Scheme (NAAS). An employer can become eligible for a subsidy in either of two ways: (1) where his apprentices equal or exceed 25% of employed skilled workers, the subsidy is payable in respect of all his 1st-year apprentices; (2) where he fails to qualify under the first proviso, but has increased the overall level of his apprentice employment over the preceding year, the subsidy is payable to the extent of the overall increase achieved. Other measures have included the temporary payment for a specified period of time of wage subsidies to maintain apprentices in employment.


EVERYONE LEARNS A TRADE - Dahomey

Last June a decisive step was taken in Dahomey in reforming the education system. Among a number of legislative texts adopted was a new Order providing guidelines for the whole education system. The new school system will be an integral part of the social structure and will become a centre for promoting social and economic development. No age limit has been set as regards compulsory schooling and every pupil leaving school will have acquired a trade. The training will be given within the 10-year primary school system. Secondary schooling will correspond to higher education. A People's Centre for education, further training and initiation into productive work (Centre populaire d'éducation, de perfectionnement et d'initiation à la production - CPEIP) will provide workers opportunities for continuing training at all levels.


EDUCATION ACT - France

The new Education Act adopted in July outlines the main principles governing the reorganisation of pre-school, primary and secondary education. Compulsory education now covers the period from six to sixteen years of age. Primary schooling comprises five levels and is followed by a 4-year common junior secondary cycle both of which are given in the same educational institution (colleges). The two final years of this cycle may include trade theory and training periods given outside the school. Senior secondary education will combine both general education and specialised occupational instruction and will be completed either by a senior secondary school leaving certificate or by a trade certificate which provides a basis for more advanced education.
training. The vocational training certificate may be awarded on the basis of modular training units. Detailed regulations will be established by decree.


CHANGES IN VOCATIONAL TRAINING - Hungary

Decree-No. 1/1975-of-the-Minister-of-Labour-introduces-certain-changes-into-the-regulations - No. 13/1969 of 30.19.1969 - enacted under the 1969 Vocational Training Act (Law No. VI). The new regulations specify the qualifications required for different types of teaching posts in vocational training. They also lay down admission criteria governing entry into the various forms of vocational training and cover organisational questions. A classification of all occupations requiring vocational training is included as an annex.


GENERAL AND VOCATIONAL EDUCATION - North Korea

The compulsory education period in North Korea has been extended to eleven years and all students will follow a combined course of general and vocational education. The aim is to prepare all young people to take their place in a socialist society and to contribute to the economic and cultural development of that society. Improvements in educational facilities and teacher training will be introduced so as to raise existing educational standards.


ORGANISATION OF PRACTICAL FURTHER TRAINING FOR TEACHERS - USSR

On 5.5.75 the Ministry of Higher and Specialised Education in the USSR issued regulations governing the organisation of further training for technical school teachers in ultra-modern undertakings. The regulations give priority to the organisation of such training for teachers of vocational subjects, require the alignment of the syllabi with other forms of further training and make it obligatory at the end of the training period for trainees to include, in their written assessment on the training given, recommendations for the practical application of the skills and knowledge acquired in a teaching situation.

New institutions

CAREERS EDUCATION AND COUNSELLING - United Kingdom 153

A new National Institute for Careers Education and Counselling has been set up in Cambridge. A response to an ever-increasing demand for improved guidance services, the Institute will carry out training for all involved with guidance activities, establish a training resources centre and carry out curriculum development and research. Among the areas pinpointed for research are: vocational maturity; exploratory vocational behaviour; occupational adjustment; self-concepts in decision-making; ways of measuring counselling interventions. The basic programme of the Institute will be built up over a period of three years and will provide the basis for establishing a more systematic framework for the careers education and counselling methods being developed in the United Kingdom.

National Institute for Careers Education and Counselling, Bateman Street, Cambridge CB2 1LZ, United Kingdom.

Management

FILMS FOR MANAGEMENT TRAINING 159

A film catalogue produced by the ILO provides a guide to 417 films for use in management training courses. Listed under eleven main headings with 22 sub-headings, subject areas include such topics as human relations, job evaluation, selection and placement, training methods, production planning and control, work sampling, work study and ergonomics. There is a comprehensive description of the various films and an alphabetical index. Each film description gives details of publisher, publication date and country of origin together with the basic characteristics of each film - black and white, running time, cartoon, lecture, etc. Every effort has been made to provide adequate information on the nature and content of each film, including, where possible a qualitative appraisal.


ANALYSIS OF MANAGEMENT FUNCTIONS - France 160

A survey of "occupational categories with management functions" was initiated by the Study and Research Centre on Occupational Qualifications.
In the first phase, a method of analysing management activities was developed. During the second phase, scheduled for completion in 1976, the method will be applied, over a wide range of functions in 40 enterprises, to analyse nearly 500 occupational categories. This should lead to a definition of the expression "occupational categories with management functions" and to the establishment of the qualifications and experience required to take up such employment.

Note d'information du Centre d'études et de recherches sur les qualifications, Paris, No. 27, June 1973, 6 p.

MANAGEMENT TRAINING PACKAGE - UK

Based on ten years research and experience, a new management training package has been developed by "U" Group Training Limited. The "U" stands for "units of planned change" which make up a training programme designed to improve individual, group and organisational performance. Eight units, dealing with various aspects of the management function (personal effectiveness, team-effectiveness, inter-group development, etc.) make up the total programme and units can be taken in any order. A unit generally lasts 5 days and unlike sensitivity training, no effort is made to deal with personalities and feelings. Throughout the programme, strong emphasis is placed on dealing with real job-related problems rather than with hypothetical cases.

U Group Training Limited, 11/12 The Green, London W5 5EA, United Kingdom.

Research

TRAINING FOR MASS COMMUNICATION - UNESCO

A recent UNESCO report describes the present situation of mass communications training (radio, newspapers, television, films, and other audio or visual forms) and attempts to pinpoint deficiencies and identify potential influential developments. The training of journalists, film-makers and broadcasters must be clearly focussed, not on private political or commercial goals, but on the advancement of the total society. A special kind of competence and dedication are required and, to a considerable extent, the process can be taught. After identifying training objectives from the viewpoint of the media, the individual trainee and society, the report discusses various training options and specific operational problems. These are situated within the context of both developed and developing countries.
final chapter describes some experiences of course organisation on modular principles.

Training for mass communication, UNESCO, Reports and papers on mass communication, Paris, No. 73, 1975, 44 p.

Twelve European countries and a number of international organisations have collaborated in preparing an inventory of research projects, both current and completed, dealing with a wide range of subjects such as occupational mobility, the occupational fields of married women, attitudes of mothers and their daughters towards education and towards occupations and domestic activities, the various kinds of discrimination. Some countries (Austria, Belgium, the Netherlands) have provided detailed descriptions of these research projects while others have merely drawn up a list of such activities. The document was prepared for the 39th session of the Social Committee of the Council of Europe.

Studies and Reports carried out in the field of "Women at Work", Council of Europe, Strasbourg, 4 April 1975, Doc. CE/Soc (75) 3, 80 p. (mimeo.)

EDUCATIONAL RESEARCH REGISTER 1971-1973 - Commonwealth

This is the second Research Register listing recent and on-going educational research in Commonwealth countries. Projects are listed under 18 subject areas which include educational planning, teacher training, out-of-school education and technical education. Each project description includes the research institution, the main objectives and methodology and the project duration. An author and an institution index are also provided. The register is to be issued biennially as part of the Commonwealth Secretariat's information programme and provides a valuable reference work for researchers.


COMMONWEALTH CORRESPONDENCE INSTITUTIONS

The use of correspondence courses by university, government and other non-profit or official organisations within the Commonwealth has been documented in a recent publication of the Commonwealth Secretariat. The information given is strictly factual and covers the courses provided by 59 institutions in Commonwealth countries. The institutions are listed by country and each entry
gives comparable information about the institutions concerned, together with a brief description of the correspondence courses offered which often form part of a multi-media programme. The aim is to provide an up-to-date reference document and to encourage co-operation between the various institutions.


REVIEW OF INTERNAL TRAINING - Sweden

A government-appointed committee of three experts will in 1975/76 assess the volume and objectives of training within undertakings in the private and public sectors - including public administration. The main criteria of evaluation will be:

- the value of internal training in the framework of over-all policies for ensuring continuing and secure employment;
- internal training as a means of satisfying the educational needs of the individual for improving his position in employment;
- internal training as a means of meeting the needs of undertakings as regards the supply of trained personnel.


ADVICE ON TRAINING METHODS AND PRACTICE - UK

Machinery has been set up, in the form of a Training Research Advisory Committee, to provide advice to the Training Services Agency (TSA) on research into training methods and practice. The Committee is composed of training and research specialists and of representatives of employers' and workers' organisations. The Committee will advise the TSA, through the Director of Training on: the TSA's research programme in the field of training practice and techniques; the design and likely usefulness of particular projects; research projects proposed by outside bodies seeking financial support.

Training Services Agency, Directorate of Training, 162-168 Regent Street, London W1R 6DE, United Kingdom.
More than 3,500 research studies are included in this Index to Research in Business and Office Education. In Part I, the studies are listed alphabetically by author. Part 2 lists by subject area those research studies related to the teaching of secretarial studies, shorthand, transcription and typewriting. Part 3 lists by subject area those studies related to the teaching of accounting, book-keeping and record-keeping. The studies reported date from 1891 to 1972 and the criteria for inclusion was that each study had to deal with course content and teaching methodology. To ensure comprehensive coverage many studies have been listed under more than one heading and many subject areas are cross-referenced.


Training standards

APPRENTICEABLE TRADES - Austria

Since June 1st the number of apprenticeable trades in Austria has been reduced to 225 from 305. Several obsolete trades have been abolished while related trades have been combined into a single occupational category. This change reflects the reforms supported by the Austrian Trade Union Youth Movement (Österreichische Gewerkschaftsjugend) and which call for broad basic training.


DURATION OF APPRENTICESHIP - FRG

A recent decision of the Federal Vocational Training Committee (Bundesausschuss für Berufsbildung) has clarified the provisions of the 1969 law concerning the possibility of reducing - or extending - the duration of apprenticeship. According to the level of education or training acquired beforehand the apprenticeship period may be reduced by 6-24 months. Training received within the undertaking is totally deductible from the apprenticeship period if the objectives of the training are identical.

TELE-EDUCATION FOR EDUCATORS - FRG

Last October saw the introduction on the Southern region of the German Broadcasting network (Süddeutsche Rundfunk) of a new 31-hour course covering two semesters and entitled "the counselling role in education". The broadcasts will be transmitted on several regional networks and in Switzerland. They are intended for all concerned with the educational process including parents, teachers, educators and for those interested in such questions as: causes underlying infantile and adolescent disorders, experience needed to become a counsellor, the counselling role of parents and educators. The programmes will be supplemented by relevant educational documentation and certificates will be awarded after an examination.

Funkkolleg - Zentralbüro, D-600 Frankfurt/M 90, Robert-Mayer-Str. 20.

Agriculture

APPRENTICESHIP ON THE FARM - Australia

A Farm Apprenticeship Scheme - the first in Australia - has been introduced into the state of Victoria. It is primarily intended to produce skilled farm workers but is also expected to facilitate advancement into middle or higher levels of training. The minimum age of entry is 15 and the educational standard is completion of junior secondary education. The term of apprenticeship will be four years, but is reduced by 6 or 12 months if an applicant has completed higher levels of secondary education. Courses have been designed on a modular basis and apprentices will be required to complete 24 basic skill modules and 12 alternative modules relating to fruit-growing, grazing, dairying and cropping. Off-the-job instruction will be on a day or block release basis. A request has been made to include the scheme in the National Apprenticeship Assistance Scheme thus enabling farmers to benefit from government training subsidies.


Construction industry

BASIC VOCATIONAL TRAINING IN THE CONSTRUCTION INDUSTRY - Austria

Since 1971 the Federal Institute for Higher Technical Studies (Höhere Technische Bundeslehranstalt), has been carrying out an experiment in the
training of technicians for the construction industry. Instead of being obliged, immediately on starting their training, to choose between specialising in the building trades or in civil engineering, the trainees will be expected to make their choice only on completing two years of basic training common to both specialisations. During these two years, the trainees take part in numerous activities designed to help them participate actively in making their final choice. Professional circles are awaiting the results of the first terminal class (1976) with interest.


Transports

BETTER TRAINING FOR TRANSPORT WORKERS - Denmark

The Danish long haul truck drivers and their employers have agreed that just having a driver's licence is not enough for driving heavy trucks in international transport and other heavy vehicles and transport equipment. A general plan has been prepared for the basic training of drivers and crane operators and a first training course will be organised in 1976. It will include 880 hours of vocational subjects and 560 hours of general instruction. The trainees will get broadly acquainted with all the various branches of the transport industry. More and more money is invested in transport work and skilled workers are needed to take good care of the increasingly expensive equipment.


Training systems development

AFRICANISATION OF TRAINING STANDARDS - Nigeria

In Nigeria responsibility for trade examinations is gradually being transferred from the City and Guilds of London Institute to the West African Examinations Council. Devolution of responsibility which started in 1972 is scheduled to be completed by 1978. During the transfer period examination certificates will be issued jointly by the two institutions.

Under the Employment and Training Act of 1973 the raising of a levy by industrial training boards became optional. This June three industrial training boards took up this option – Paper and Paper Products industry, the Engineering industry and the Printing and Publishing industry. With the exception of small undertakings employers in these industries are now liable to a levy equal to one per cent of their payroll.


Methods and media

TRAINING BY SATELLITE – Indonesia

Indonesia plans to upgrade its educational system using a communications satellite. Primarily intended for telecommunications, one of the twelve channels will be used for educational television programmes. Initially satellite transmissions will concentrate on in-service training for primary school teachers and out-of-school education programmes. In this way it will be possible to reach the large number of teachers in isolated villages throughout the country. At a later stage it is planned to include vocational and technical education programmes. Plans are being made also to use the satellite in conjunction with technician training courses to provide information on the latest technical developments and to complement instruction at university level. The system will be operational by 1977.


TRAINING EQUIPMENT FOR OPERATORS OF FORK-LIFT TRUCKS – GDR

A group of six trainees and two instructors at a paper mill, the VEB Papierfabrik Greiz, has constructed equipment for training people to drive, operate and maintain fork-lift trucks. The equipment consists of a simplified model of the truck on which the trainees can learn to use the hydraulic system and a simulation of the oil circuit. Individual work sheets help accustom the trainees to working on their own.

Once a month apprentices in the German Federal Republic can ask questions of specialists on any of the questions which are uppermost in their minds during a broadcast programme run by three radio stations (Bayerischer Rundfunk, Hessischer Rundfunk, Norddeutscher Rundfunk). The programme lasts 45 minutes. It includes a film which provides a basis for discussion and gives some practical information. During recent broadcasts some of the problems examined have been: how to choose an occupation, training within the undertaking, apprenticeship in small undertakings, etc.

Bayerischer Rundfunk, D-8000 München 2, Postfach 20 05 08.

**Bibliographies**

**EMPLOYMENT AND TRAINING - France**

The Ministry of Labour, Employment and Population publishes a quarterly journal of bibliographical references on employment and training. It comprises documents which have been selected and analysed by central and regional bodies taking part in the information network on published material in this field. Each reference is accompanied by a short analysis and the items are grouped according to the following subjects: general aspects of employment, training and social advancement; training; the link between training and employment; the employment market; employment and qualifications; employment and conditions of work within the undertaking. The journal has four indexes: an index according to type of document and author, an extremely detailed index of concepts, a statistical index and a country index.


**PSYCHO-PEDAGOGICAL TRAINING FOR FOREMEN - GDR**

The Central Institute for Vocational Training (Zentralinstitut für Berufsbildung) has compiled a selective bibliography for foremen and for the management staff responsible for their training, including their further training. It is intended to give guidance regarding the mass of published material concerning theoretical and practical problems concerned with the psycho-pedagogical principles of management which may be encountered at foreman level. The bibliography contains 145 references drawn from literature published in the German Democratic Republic from 1971 to 1974.
This bibliography by the Institute of Personnel Management is intended to provide a representative sample of the literature available on personnel management, offering a comprehensive framework of reading for both the student and the practising manager. The 3rd volume in a series on personnel management questions, it covers the various facets involved in the education, training and development of personnel in industry. It covers general works on industrial training, the national aspects of training, the education system and the problem of transition from school to work, specialist training, management training and development, training aids and the evaluation of training. The types of material covered include printed books, pamphlets, essays, case studies, text books and official publications. The entries are arranged in alphabetical order of author within the subject headings and there is both an author index and a table of contents. The bibliography is limited to books published in the English language, mainly in the United Kingdom and the United States.


This directory of information sources on educational technology lists over 400 organisations in the United Kingdom willing to give information or advice on educational technology. It is divided into the following sectors: educational technology in general; educational research and development; teaching and learning methods; broadcasting, film and television; learning materials and equipment; organisation and use of resources; educational travel; educational technology related to specific curricula; educational technology and the disadvantaged. Each entry describes the areas in which the organisation is willing to give information and/or advice in the context of educational technology. There are three indexes comprising alphabetical lists of abbreviations, organisations and subject areas.

The failure of the formal education system to solve the problems of mass poverty in rural areas raises the question as to what can be done through non-formal education. Seventeen case studies carried out by the International Council for Educational Development represent an attempt to provide some answers to this question and to isolate the factors which contribute to the success or failure of a wide range of non-formal education programmes. They contain the empirical evidence for two analytical studies of education for rural development commissioned by the World Bank and UNICEF. This evidence shows education to be but one in a complex set of factors which bring about change in rural areas. Viewed in the context of the World Bank’s new policy of aid to education which seeks to promote mass, rather than elitist learning systems, the case studies make pertinent reading. They provide the facts governing new guidelines to view national systems of education in terms of comprehensive learning systems embracing formal, non-formal and informal education.


DEVELOPMENT PHILOSOPHIES

This is a dialectical study of development philosophies in which individualistic, urban-centred, techno-economic decisions from colonial-heritage development strategies in most developing countries are contrasted with rural-centred, mass-oriented, collectivist development principles inspired by Mao-tse-Tung. The author is heavily biased towards the latter. He makes out a case for using the Chinese development concepts as a universally applicable approach to development problems. The book is valuable because of its analytical depth and ideological perspective, the author’s familiarity with Chinese practices and the extensive use of well-selected sources.

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**Author:**
HANSEN, Lorraine Sundal; TENNYSON, W. W.

**Title:**
A career management model for counselor involvement

**Bibliographical references:**

**Translation**

**Subject analysis**
Article describing a conceptual framework which will enable counselling personnel to play a more active role in helping individuals manage their own careers: description and implications.

**Contents analysis**

If vocational counsellors are to have an impact on career education programmes [cf. abstract No. 1/B 49304, Vol. 11] they need to play an active role in helping individuals become conscious "managers" of their own careers. A 5-year research project carried out at the University of Minnesota has resulted in the development of a conceptual model (the Minnesota Career Development Curriculum - CDC) to be used as a framework for counselling activities to help students in their career development. It is based on four major steps.

**Step 1: Stating the value rationale**
The educational aim is to develop self-aware individuals who can realise their potential and acquire skills to work out relationships between themselves and a complex, changing society. "Career development" is therefore defined as "part of human development: the life-long process of self-development within the context of work". Career education is then seen, within an expanded context, as the "teaching, counselling and community interventions to facilitate that development".

**Step 2: Identifying and providing conceptual definitions of the relevant management tasks or competencies**
Career development stages, like physiological or intellectual development, are sequential but are not directly tied to age. The CDC model defines a set of sequential career management tasks. These tasks denote a developing capacity on the part of individuals to construct their experience and control their environment. They are related to the various levels of career education: primary, intermediate, junior, senior and post-secondary levels. For example, at post-secondary level the tasks would aim at developing: interpersonal skills essential to work; information processing skills about self and work; a sense of community; commitment to the concept of career; acceptance of and participation in change; creative application of career management and skills to life roles.
Step 3: Programme objectives stated in general behavioural terms

Behavioural objectives govern the criteria for mastery of the career management tasks. The CDC model includes 90 general instructional objectives and 275 specific objectives under such headings as "life styles and work", "values identification", self-concept exploration", "significant others", "social contribution of work", etc.

Step 4: Stating operational definitions and alternative delivery systems for programme objectives

The delivery systems or strategies for implementing programme objectives will vary from one setting and level to another. It is important, however, that the strategies used should be closely linked to clearly defined objectives and tasks. CDC strategies include: counselling; curriculum content; exploratory work experiences; career information sources; multi-media approaches; relationship between practical and theoretical instruction; in-service training; placement and follow-up. The linking of strategies to objectives is essential in so far as it provides career guidance programme planners a better basis for evaluation which is a vital part of programme formulation.

Implications for counselling personnel

If career counsellors are to influence career education programmes, they need a framework on which to build their new role. The CDC model provides one example of such a framework. It provides an opportunity for counsellors to play an increasingly active role in the educational system and to help individuals manage their careers in a more conscious and purposeful manner.
Article on an experimental vocational training programme for people living in sparsely populated rural areas: programme design; utilisation of the teacher as a manager of learning resources.

Young people living in sparsely populated areas suffer a great disadvantage: these areas simply do not justify the expenditure of resources necessary to build comprehensive vocational centres of the size required to provide adequate vocational training facilities. Furthermore, opportunities for on-the-job training in local industry are scarce. A pilot programme is therefore being carried out in a school in West Virginia to test out a vocational training programme specifically conceived for underpopulated rural areas.

Conceived as a co-operative work/study programme arranged between employers and a West Virginia secondary school, (Milton High School, West Virginia), the aim is to provide a combination or interdisciplinary programme which will offer vocational training covering seven occupational areas. In a combination programme one person acts as a "teacher co-ordinator" for all students - whatever the occupation being studied. As a general rule, group instruction is given on topics common to all occupations and individualised instruction for the topics specifically related to each student's occupation. Practical instruction is the responsibility of the employer or training sponsor.

Until very recently, attempts to introduce such programmes have been beset by many difficulties. Instruction was generally of a very general nature and it was difficult to recruit and retain a teacher co-ordinator. However, advances in individualised, self-instructional materials have made such a programme possible and materials can now be found that are applicable to all but the most obscure occupational areas. Along with advancements in the development of instructional materials, significant steps have been taken to make the materials accessible to educators.

With the availability of these new learning materials, particularly individualised learning activity packages, teacher co-ordinators need only act...
as managers of learning resources who give assistance and direct students in the acquisition of competencies demanded by the occupations for which they are being training.

The other essential ingredient for the success of such a programme is the active support of the employer or training sponsor. Proficiency in the practical work can be observed and verified by the employer or sponsor while the student is on the job. Such sponsor participation lessens the need for the teacher co-ordinator to have expertise in all areas. Furthermore, it promotes the close partnership between school and employer that is necessary to support the occupational training and maintain proper relevance in the basic theoretical subjects.

To judge the effectiveness of a combination programme as opposed to a single discipline programme makes no sense. This alternative for providing vocational education can be measured only by its contribution to meeting the needs of students who would otherwise be deprived of training opportunities altogether.
Article on the pressures producing an enlarging role and increased responsibility for the training function to provide experiences and activities that will lead to both manpower and organisational development.

The present day approach to individual and organisational development no longer considers the individual apart from his organisation or the community in which he lives. Such development is influenced by a multiplicity of factors. These include a new concept of man based on increased knowledge of his complex needs, a new concept of power based on collaboration and reason, and a new concept of organisational values based on humanistic and democratic ideals.

Moreover, the occupational obsolescence rate of people in the organisation of the future will make it necessary for individuals to cope with change in their own lives, careers and organisations. People must have second and third careers in order to keep up with the rapid change required. The continued growth of a service-oriented society will also change the complexity and nature of many organisations and jobs. In addition, adequate use of members of minority groups will be a constant challenge in an evolving and changing society. Such pressures only reinforce the need for human resources development.

In future those who have responsibility for human resources development will be judged by their over-all contribution to human/organisational growth and not just by the number of training programmes. This means an enlarged role and an increased responsibility for the training function to provide experiences and activities that will lead to manpower and organisational development. In addition, administrators must place greater emphasis on their own development and the professionalism which will be required to bring about organisational change.

There is, therefore, an urgent necessity to determine whether training and development activities result in learning that is congruent to the organisation in which they are to be applied. In assessing any contemplated plan for human resources development several criteria should be
A basic precondition to success is that any plan should be related to a clearly expressed value system and to organisational needs at a given point in time.

A practical awareness of the probable organisation of tomorrow, should accompany specific immediate objectives.

There should be clear links between individual and organisational change as well as specific criteria for effective performance.

Training should be planned and implemented by experts in their field and evaluation procedures should be related to organisational, group and individual behaviour.

Finally, there is a need to ensure that the training produces an organisation that is pro-active for change rather than just reactive to external changes.
According to recent statistics in the province of Quebec, only 14% of secondary school pupils enter the vocational streams, whereas the desired rate in the 14-20 years age group is now 40%.

If more young people are to be attracted to this form of training, the courses must take greater account of changes in occupations. To this end, new syllabi were included in the 1974-75 annual of secondary education published recently in Quebec. The courses are to be revised on the basis of a system of modules which permits continuous adaptation of the content of initial and further training. This adaptation has been made possible by a general method of revising training programmes developed by the "Education and Employment" group of the Ministry of Education [cf. abstract No. 4/B 57249, Vol. 12]. This method makes it possible to constantly assess syllabi in relation to the knowledge and skills required to do a job.

As well as updating existing syllabi, other measures include: standardisation of tools, equipment and methods of supervising apprenticeship; development of modern teaching techniques; improved initial and further training of teaching staff.

If the reform is to succeed, however, certain proposals made by the 1964 Royal Commission of Inquiry should be given greater consideration, among them: integration of secondary-level technical, commercial and domestic science courses into the comprehensive secondary schools; measures to encourage vocational secondary school pupils to enrol in the new general and vocational colleges (created as a result of the Commission's report) which prepare either for entry into university or for a career at higher technician level; diversification of technical and vocational training for girls.

Furthermore, a change of attitude is called for. Training should be regarded as a social investment, not as a consumer outlay.
Business games are increasingly being used as teaching devices. Based on the experience gained in war games and on the availability of high-speed computers, business games appeared as an answer to a demand for new methods of training managers and business students. Their primary objective was to improve participants' decision-making by providing them with experience similar to real business experience, much faster than could be done in real-life. Consequently, games have tended to become more and more complex, in an effort to parallel reality closely.

As experience with games built up, vague statements about improving decision-making were replaced by more specific objectives such as: giving participants an over-all view of the organisation, making them more aware of behavioural factors in business interrelationships. The games themselves, however, have still relied on the assumption that the benefits are highly dependent on the degree of similitude between the game and reality.

Besides general management games, other kinds of games have appeared which aim at improving specific abilities considered crucial for good management. Some aim at developing analytical and modelling abilities. Others aim at familiarising the player with a functional area (marketing, finance, production, etc.). Here, the idea is no longer to learn solely from the game, but merely to use it as a support for other teaching methods or as a way to illustrate them.

Alternative ways of using games have been proposed which try to avoid certain drawbacks. Because most games put the emphasis on the quantitative aspects and do not allow much initiative, some authors have tried to introduce qualitative elements in games, and to provide for some flexibility during the game. Such an approach is based on working out strategies rather than taking immediate decisions. It is even possible to try
out and evaluate different strategies. The educational value of this approach is that it stresses long-range thinking and avoids the emphasis that most business games place on short-term crises and immediate decision-making.

Games are costly to develop and operate. For that reason, research has been carried out to try to assess experimentally their impact on learning. Most studies indicate that games are a useful tool for managerial teaching and training. However a recent survey suggests that the empirical evidence on the question is inconclusive. It also points out the difficulty of measuring the results of games and limitations of the methods that have been used to evaluate them. Taking the ten most common claims for business games, the study shows that it is opinion, rather than empirical evidence which supports such claims.

It is suggested that two elements determine the value of a game. First, there is the link between objectives and design. This means that a game can only meet its objectives if these objectives serve as a basis for the design. The kind of game, its scope, the periodicity of decisions, the elements that are or are not incorporated should all be determined by reference to the purpose for which it is to be used. Second, even a properly designed game cannot be used alone. The full potential of games can only be realised if these are integrated in a larger teaching environment. Generally speaking, not enough attention is paid to these two elements.

In recent years the use of games for research purposes has considerably increased. As management games generally simulate the major functions of an enterprise and ask for group decision-making, they create organisational problems very similar to those appearing in real life and so offer experimental situations in which to study behavioural and organisational problems.

However, it should always be borne in mind that in the real world, many uncontrollable factors interact, making it difficult to identify exactly what caused what. In contrast, the game "world" is know to the researcher. As in games used for training purposes, particular attention should be paid to the links between the objectives and the research design. Considered as a research tool, however, games become an expensive, time-consuming process which cannot be utilised to study all management problems. More research is needed to delimit their potential in this field.
In the German Federal Republic, the law on vocational training and the legislation concerning the artisan trades [cf. abstract No. 1/L 88-1, Vol. 9] gives the training adviser (Ausbildungsberater) responsibility both for supervising the progress of training and the observance of the contract, and for advising trainees. This double task puts the adviser in an ambiguous position in relation to the trainee.

In practice, the adviser's work takes three forms: individual, in small groups and collective. The first is the most common and the best adapted for resolving individual problems.

The law, while extremely strict in defining the role of the training adviser, does not lay down precise standards for his training. Yet if he is to perform his duties effectively he must possess considerable theoretical knowledge and practical know-how. To remedy this omission, the Vocational Training Committee of the German Association of Chambers of Artisan Trades (Deutscher Handwerkskammertag - DHKT) recommends the following qualifications for training advisers. Those whose main function is advisory should as far as possible have been trained in a skilled trade, have passed the mastercraftsman examination, possess several years' experience and understand the realities of working life. The Federal Vocational Training Committee (Bundesausschuss für Berufsbildung) also considers that such training and experience are indispensable. In addition, the adviser's qualifications must be continuously updated by further training to keep pace with practical and technical developments.

Since 1972, the German Association of Chambers of Artisan Trades has been organising centralised training activities at various levels, in conjunction with the Institute for Research into Vocational Training at the university of Köln (Cologne), in the following fields: (1) principles of law and new legislation, (2) recent pedagogical and psychological developments.
(3) advisory techniques and analysis of the advisory function. These courses are rounded off with working parties at the regional level.

Since the law on vocational training came into force, the number of training advisers has steadily grown. Their numbers nevertheless fall short of the figure recommended by the Federal Vocational Training Committee, which would permit at least one visit to each trainee per year or, in other words, one adviser for every 300 trainees.

[Standard report form for a training adviser; two case studies by training advisers].
In 1972, following a request by the Central Office for Industry-Based Training (Zentralstelle für betriebliche Ausbildungsfragen) a survey was carried out by the Pedagogical Institute of Zurich University (Pädagogisches Institut der Universität Zürich). The objective was to collect data which would be useful in drawing up a training programme for training officers.

Implementation of the survey

The survey was limited to private companies in the German speaking Cantons of Switzerland with more than 700 employees and with a training officer responsible for a minimum amount of training activity.

Data were collected during interviews on the basis of a structured questionnaire. Two types of questionnaire were drawn up for: (1) full-time training officers; (2) personnel directors without training responsibilities. The questionnaires covered all or some of the following subject areas: company characteristics; training activities; qualifications and experience of the training officer; company status of training officers; training objectives; qualities expected of a training officer. Out of 182 companies, a total of 105 returned valid questionnaires. Of this number, 45% had between 700 and 1,500 employees, 24% between 1,500 and 3,000 and 3% more than 10,000. Distribution by economic sector was as follows: mechanical engineering (more than 50%); commerce (11%); chemical industry (7%).

Main findings

In about 61% of the companies, steps were being taken to organise training while in 24% it was already well organised. Organisationally, the most efficient training would appear to be in the chemical, textile and commercial sectors and in companies with more than 1,500 employees.
Among 57% of respondents, training was the part-time responsibility of the personnel director. The largest proportion of full-time training officers was to be found in the commercial sector and in insurance and banking. The majority of companies with more than 2,000 employees had employed a full-time training officer for the last five years.

In over half the sample, full-time training officers had been recruited within the company from either the technical or marketing departments.

In all companies junior and middle-level executives were the main beneficiaries of training.

Conclusions

Regardless of how increased production had been achieved, whether by increases in the labour force or through rationalisation, companies were trying to make good resulting training deficiencies by systematic training action. Due to the fact that it is easier to define training programmes in relation to basically stable structures, the development of training was more advanced in companies where expansion was the result of increases in the labour force.

Regardless of economic sector, training develops in all companies according to the following stages: (1) decision to allocate responsibility for training to a specific member of the staff; (2) separation of functions carried out simultaneously; (3) allocation of responsibility for the training function at management level. At the same time, the functions of the training officer develop along the following lines: (1) he plans the training, runs internal training courses and organises external courses; (2) increased involvement in planning and running internal courses accompanied by a reduction in the use of external courses; (3) reduction in purely training activities and emergence of his role as a trainer of trainers and as a training consultant.

In the final stage, the training officer is required to give instruction in teaching methods and techniques. It is therefore essential to include technical instruction in the training of training officers. Where an independent training section exists, the training officer must have experience in the field of management and in management training.

Whatever the stage of development, a knowledge of teaching methods and techniques is necessary in fulfilling training officer functions.

These findings could be utilised in drawing up a training programme for training officers.

Annexes: statistical tables; questionnaires.
A study, carried out in 1971-72 in a final secondary school class, sought to identify and explain the difficulties encountered by pupils studying electronics. It relied on an analysis of the answers and mistakes made in written exercises by some 20 students during the school year. Interviews were also carried out with a number of pupils. The first exercises tested understanding of common technical components, the diode and the transistor, the subsequent ones dealt with assembly work. The psychologist who took part in the study with a teacher did the time-limited written exercises at the same time as the pupils.

The analysis of the data obtained was based on psychological theories (theory of form), appraisal of coding systems (work study) and the philosophy of sciences (J. Ullmo, G. Bachelard).

In particular, the analysis relied on the difficulties presented by a mesh network equation.

An analysis was made of the difficulties involved at each of the 5 stages in the algorithm to be followed in solving a mesh network equation: (1) identifying the mesh network to be studied, (2) transcription in diagram form of the mesh network, (3) direction of the charges at the terminals of components, (4) general algebraic formulation of the mesh network, (5) algebraic transcription of the formula: I=f(V).

At each stage, the aim was to understand why the formula rules had not been understood and, where they had been wrongly applied, why this had happened.
Preliminary report on a study of 3,000 young people over the 14-to-18 age span to determine the relationships between schooling and training, jobs and job satisfaction, reasons for occupational choice; differences relating to social status of parents, sex and school-leaving level.

Social status and continued schooling and training

There is a positive correlation between the parents' social status and the level of education and training of the children. Children from homes of higher social status tend to stay at school longer and a larger proportion of them go into academic streams. Children of parents in lower social groups leave school earlier and fewer of them take up an apprenticeship or other form of vocational training. This social bias is reinforced year by year. The number of years of completed schooling determines the level of employment once they have left school. Girls do better at school than boys but fare less well in training for employment and in employment; 20% of the boys and 40% of the girls do not get any vocational training at all and more than half of these girls are working in the home.

School versus apprenticeship

The part of each generation leaving school at the end of compulsory schooling and the part not receiving further education or vocational training have remained essentially the same between 1965 and 1973. But the numbers going into apprenticeship and into other vocational training are decreasing while the numbers staying on at school are increasing.
Schooling and employment

The shorter the period they spend at school, the larger is the proportion of adolescents going into unskilled work or failing to find employment after school. There is also bias with regard to both social class and sex, and girls are the most disadvantaged in this respect.

Occupational choice, job mobility and job satisfaction

Vocational guidance plays a small role in occupational choice; advertisements and personal initiative and - particularly among those with vocational training - parents' advice are determining factors. Among those who go into employment, girls have more frequent job changes than boys. Those who had had vocational training change jobs less often than those without such training.

To a large extent, job status seems to determine job satisfaction. Those who are in training (e.g. in apprenticeship) are most often those who are satisfied with their jobs; those not in training tend to be less satisfied. But job satisfaction decreases with rising age.

The findings will be analysed in a wider framework in a follow up report.
Monograph on a survey carried out to assess the effectiveness of 1-week marketing courses for executive staff: methodology; findings and implications.

The evaluation of the effectiveness of marketing courses is an area which a review of the educational and management literature indicates has been much neglected. This monograph outlines an investigation of four external, 1-week, post-experience marketing courses aimed at presenting participants with the most recent thinking and ideas in the marketing field. The investigation relied not only upon data collected from those executives who participated in the courses but also upon corroborative material provided by their immediate supervisors. A total of 100 participants (and therefore 100 immediate supervisors) made up the sample.

The purpose of the investigation was to assess the effectiveness and to identify directions for improvement in such courses. Basic data were collected by administering a set of five specially designed questionnaires—three completed by participants (before, at the end and 3 months after the course) and two by their immediate superiors (before and after the course). The questionnaires were drawn up on the basis of a review of the literature on management course evaluation, discussions and interviews with course organisers, sponsors, users and evaluators, and the observation of similar courses in operation.

Findings and implications

The over-all favourable impression which participants and their immediate superiors formed leads to the conclusion that short courses do have an important role to play in the development of marketing executives. Evidence indicated that course attendance sometimes was of specific help to a marketing executive in his job. There was evidence too that many valued the opportunity to get away from their jobs for a while. The courses seemed particularly successful in meeting the knowledge type objectives that many participants said they held.
The end of course ratings were all positive. Participants felt that both course and personal objectives had been achieved. About 50% of participants rated the courses as very good; almost 50% rated them as being better than anticipated. Many participants planned to apply the knowledge gained and were often specific about such plans.

The follow-up survey which took place three months after the end of the courses continued to show fairly high levels of benefit ascribed to most topics covered on the courses. Though few could quantify the benefits derived from course attendance, the favourable nature of many general comments and the reasonably high proportion of participants recommending the course suggested that, for the majority, the courses had been generally satisfying and worthwhile experiences. This view seemed to be shared by their immediate superiors.

However, there was some evidence that many companies were using the courses without any apparently clear ideas of how they hoped to benefit from them. Many objectives, particularly those stated by immediate superiors were often in conflict with those perceived by participants.

This indicates a need for courses to be used more thoughtfully by industry. In addition, course users and course providers need to give much closer attention to the identification of training needs, the formulation of course objectives and the assessment of course impact. It is important, too, that there should be recognition of what the short marketing course cannot do. It can never be an effective substitute for a properly thought-out management development programme. Courses are a complement to the process.

Also it is suggested that the impact of course attendance can be heightened if sponsors formalised approaches to course selection and choice and if their use is viewed as one incident in a much more extensive and carefully thought-out development programme, then two benefits should accrue. First, there will be a better fit between the course and the participant. Second, the course evaluation problem will be placed in its true perspective where it is viewed as only one facet of a company's total effort in developing, motivating, deploying and evaluating its executive manpower.
| Author: | N'GOY NZE, S., ONANA, L., RIVIERE, Lydie, et al. |
| Title: | Des paysans prennent en main leur développement |
| Bibliographical references: | Abidjan, Institut africain pour le développement économique et social, 1974, 71 p. |
| Level | Sector | Country |
| T & D | Agriculture | Ivory Coast | |
| 11 | 1 | 666.8 |
| Translation of the abstract: | Rural workers take their own future in hand |
| Subject analysis: | Pamphlet describing a rural training and community development project in the north of the Ivory Coast: local characteristics, origins of the project, organisation and functioning of the system, results. [This abstract deals in particular with the second part: Education of and for the rural population.] |
| Contents analysis: | Within the framework of the national economic and social development effort, an experiment in rural development has been in progress since 1970 in the Bouaké region of the Ivory Coast, based on the participation of the people concerned. Villages are linked together for the purpose under the auspices of a "Federation of Village Groups": The area concerned, peopled by the Baoule, is characterised by poor land productivity and little diversification of crops, these being mainly foodstuffs, 80% of which are for family consumption. Industrial crops (coffee and cocoa) represent 23% of the agricultural output. |
| | Organisation | The experiment is based on a structure of communal discussions between "village groups". Six representatives, elected by the villagers, form the committee of each village group. Several neighbouring groups are linked together in sectors. A sectoral committee comprising six members chosen by the village committees meets every month to examine the problems of the villages in the sector. There is a small restricted Federal Committee, consisting of six village and two youth representatives, and an enlarged committee which includes in addition a representative of the delegates and community development counsellors of each sector. The role of the Federal Committee is to unify and co-ordinate community development and training activities in the sectors, carried out mainly by the farmers themselves with the aid of community development counsellors. |
| | Teaching methods | The method used for activating village meetings and training sessions is essentially dynamic. All the meetings proceed in three stages: look, reflect, act. The first stage consists of a study of the general social |
situation, by means of very simple questionnaires which are discussed by
groups of 6 to 10 persons. The second takes the form of a detailed and com-
prehensive analysis of the situation, derived from collective discussion in
the course of which the next lines of action emerge. In the third stage, the
persons responsible for different projects are named and plans of action are
decided upon. On completion of each project, the project team reviews its
activities in the light of the results obtained. This system of permanent
self-education depends entirely on the village representatives and the com-
community development counsellors. The training of the latter is crucial as
they are responsible for the training of the village representatives.

Training of community development counsellors
A teaching team is specially charged with this responsibility at the Bouaké
rural centre. Training lasts three years, with extensive periods in the
village, during which the trainee resumes his agricultural work. The train-
ing sessions as such last one week and take place every two months. All the
trainees take an active part at every stage, from the planning of the courses
to the practical work. In this way they learn to live and work as a team.

Each session starts with a frank appraisal of previous activities. The
trainees then broaden their understanding of the social situation by discuss-
ing the results of an inquiry conducted during the previous session.

Sociological, economic, biological, historical concepts, etc. are communi-
cated to the trainees as needed. In the course of the practical work, they
are introduced also to certain techniques - agricultural, mechanical, audio-
visual, etc. They also learn to organise and run meetings.

Tests are used to enable the trainee to assess his acquisition of new know-
ledge, his teaching skills and his aptitude to identify himself with his sur-
roundings. Every three months, the results are discussed with the teaching
team. Finally, the trainee is engaged for three years by the Federation if
he is considered ready to assume such responsibilities on completion of
training.
The majority of agricultural workers in India are illiterate, thus creating a barrier to introducing up-to-date agricultural techniques. Further agricultural development calls for a different approach. New techniques must be linked to a training and education programme to equip farmers to make use of such techniques.

It is therefore proposed that agricultural polytechnics (krishi vigyan kendra) be set up to teach the latest technical skills to small farmers and agricultural workers. The Kendra will cater to the needs of those who are already in employment and will teach "learning by doing". The proposal is to establish 50 such polytechnics before the end of the Fifth 5-year Plan (1975-1980). The over-all objective is to raise the living standards of the most neglected sections of the community and the productivity of the country as a whole.

Those responsible for setting up a Kendra will first have to make a survey of the agricultural potential of a particular region or locality in order to identify those aspects of growth which could help increase the purchasing power and productivity of the poor. The survey should ascertain needs, potential resources, difficulties in farming, possibilities of irrigation and soil conservation, the use of fertilizers and pesticides, crop and animal production planning. Plans should be discussed with the farm workers of the area in short orientation sessions. In this way, farmers would be made aware of their needs and how they can be helped to introduce new techniques. It is essential to demonstrate to the farmers that the latest agricultural technology will help them to make a better living.

As they will be innovative institutions, developing training programmes to suit different regional needs, the Kendras will have to function as autonomous units in so far as their programmes are concerned. Such programmes will need to be attuned specifically to the needs of the area.
of their location. However, as the majority of trainees will be illiterate farmers, all programmes should include technical literacy plus general education courses in health, family planning, farm accounting, health and sanitation, etc.

Courses would generally be of short duration (1-3 months) and would be both for men and women. Courses in the following types of subject might be provided: cultivation of local crops; plant protection; care and feeding of animals; irrigation and water control; food processing and nutrition. No diplomas or certificates will be awarded.

The Kendras may also: organise co-operative societies in the area; operate a model instruction farm; introduce "earn while you learn" projects as part of the practical training.

Each Kendra should have an active local advisory committee consisting of representatives of the local community and those concerned with the development of the area. The committee should suggest types of courses to be offered and should meet regularly to supervise the progress of the scheme.

Apart from a small nucleus of permanent staff, short-term specialists should be hired for specific courses. Emphasis in recruiting staff should be on practical skills and knowledge rather than on academic background. Competent farmers could also be invited as visiting instructors.

During the initial stages the Kendras should be financed by the central government but ultimately the state governments would also share in the expenses.

At the national level a full-time senior officer with requisite staff should be appointed within the Indian Council of Agricultural Research (ICAR) to administrate and develop the scheme. Training of instructors, administrative staff, periodical evaluation and technical guidance in improving the programme would come within the responsibility of this central organ. Advisory committees should be set up at both national and state levels to assist in setting up the proposed scheme.
When a worker is transferred to another job it means that he is to practice an occupation or specialised skill other than the one specified in his original contract. The terms of the contract must therefore be modified and a new one concluded between the worker and the undertaking. This type of job transfer which involves the redistribution of labour as a result of technical change is subject to two conditions: the free consent of the worker and the protection of his material interests.

The concept of transferral to another job is closely allied to that of acquiring skill in more than one occupation (or job). The acquisition of multi-skills constitutes a factor of the first importance in raising productivity and is encouraged by material incentives. The workers, for example, receive bonuses paid out of the savings affected by the manpower reduction made possible by a multi-skill labour force. None-the-less, the relevant legislation places restrictions on the acquisition of multi-skills. Work in the secondary occupation must not hinder the normal flow of production, must not interfere with the good execution of the primary occupation or impede the development of the worker's physical and intellectual capacities.

The acquisition of several occupational skills implies a change in the worker's functions and the conclusion of a new agreement between him and the enterprise, always assuming the possibility of such a change has not been provided for in the original contract. Contracts with the railways and river and sea transport are cases in point. Such contracts, embodying lists of occupations which are suitable for the acquisition of multi-skills, are not to be concluded if the worker prefers to practise a single occupation.
Requested by the Ministry of Education, this survey is a follow up of a pilot study carried out in 1971 at the National Research and Educational Institute (Institut national de recherche et de documentation pédagogiques - INRDP) by the Department of Technical Education and Data Processing (Département des enseignements techniques et de l'informatique) in cooperation with the Study and Research Centre on Occupational Qualifications (Centre d'études et de recherches sur les qualifications - CEREQ). The pilot study dealt with the organisation of courses leading to a vocational certificate (brevet d'études professionnelles - BEP).

Aims and organisation of the survey

The underlying hypothesis was that any appraisal of BEP courses must be situated within the social and educational context and take into account the distinctions between short-term and long-term school-based vocational education and completed general senior secondary education. The survey comprised three stages: (1) study of the fundamental objectives of this type of training as defined in statements by the Ministry of Education and the National Council of French Employers (Conseil National du Patronat, Français) in 1966 and subsequent developments; (2) analysis of counselling and teaching methods; (3) statistical survey of pupils' occupational patterns. CEREQ had particular responsibility for the 3rd stage of the survey which covered five geographical regions.

For the survey on counselling and teaching methods, 1,091 questionnaires were sent to a random sample of BEP teachers preparing pupils for the following trades: fitter-mechanic, electro-technician, shorthand-typist/correspondence clerk, administrative clerk and bookkeeping machine operator. 655 replies to the questionnaire were valid.
Main findings and conclusions

The aim of BEP courses is to prepare pupils who have completed junior secondary school education for employment in the industrial and commercial sectors after two years of training. While providing broader training than the CAP trade certificate (certificat d'aptitude professionnelle - CAP), it leads to the same skill level. The intent behind the establishment of these short-term vocational courses was to supply industry with a labour force which was both adaptable and easy to retrain. The aim was essentially utilitarian. In the event, BEP training has three characteristics which lead to certain shortcomings: it prepares for a group of trades; it does not guarantee entry into employment and a period of adaptation may be required beforehand; the better pupils can avoid taking up employment by transferring to the long educational cycle. This state of affairs is mainly explained by the fact that the certificate is not recognised by employers and the training does not ensure entry into a skilled job.

Teaching methods. The pupils following this type of training have generally failed their junior secondary education. They have very little motivation and have a feeling of inferiority. The teachers are caught up in the contradictions inherent in this type of short vocational education which prepares for job entry on the basis of multi-purpose training. They feel the need for educational reforms: syllabi which are more clearly defined and adapted to this type of pupil; improvements in teacher-pupil communication; more concrete instruction based on practical training periods and visits to undertakings for teachers and improved status for the teachers. In emphasising a more concrete approach, however, such educational reforms would tend to perpetuate the separation between manual and intellectual work and to classify pupils from this shorter cycle in the former category.

Job entry. Of pupils in the industrial BEP stream, 65% of those recently graduating found skilled work, 25% semi-skilled and 10% work of junior technician or technician level. However, these results do not lead to any firm conclusions on entry level employment as given certain conditions the same job can be classified as either skilled or semi-skilled.

In the services sector, 25% of BEP graduates are in unskilled work and more than 30%, owing to lack of versatility, became semi-skilled workers in the industrial sector. The BEP stream therefore leads pupils into manual work.

The BEP has resulted in marketing two types of competitive "product" - CAP and BEP graduates - whose level of qualification is left to the arbitrary decision of the users. It guarantees a pliable labour force responding to the increasing needs of the economy for unskilled workers.
A research project has been carried out to study the employment patterns of post-secondary graduates from hotel and catering or institutional management courses. Financed by the Hotel and Catering Industry Training Board, the survey aimed at assessing the extent to which Ordinary National Diploma (OND) and Higher National Diploma (HND) courses prepare students for supervisory and management functions respectively. The research was carried out by: a postal questionnaire to a sample of students, employers and staff members of catering colleges. The response rate to the questionnaire was 54% and included 248 men and 323 women.

**Findings and their implications**

The initial educational levels of all students was shown to be high and many could have followed an academic career had they so wished. There was no evidence of any difference of ability between entrants to any of the courses or between the sexes.

- 54% of all respondents had only held one job while those with two or more jobs had generally changed in order to broaden their work experience. A relatively large proportion (11%) were continuing with further education.

- Employment patterns were generally related to the course followed.

- Women earned about 25% less than men. HND graduates received about 20% more than OND graduates.

- Whereas colleges tended to describe their training as tailored to the students' needs, many students described training situations which took no account of their previously acquired knowledge. General student comments on the syllabi were: courses varied tremendously; HND courses
were too wide in scope and too shallow in depth; there was too much irrelevant theoretical instruction at the expense of neglecting many important practical subjects; social skills should be given more emphasis; problem-solving should be an integral part of all courses; examinations should be standardised.

- Only the HND students (246) had worked for a short period in industry as part of their training. There was almost unanimous agreement as to the necessity of this practical training period but several suggestions for its improvement were made: attachments abroad would be advantageous; some pre-course industrial experience might prove useful.

- Employers on the whole felt the participation of their companies in the industrial release period to be primarily for the benefit of the industry as a whole rather than a source of recruitment. The employer's main comment on the college courses was that many of them were not geared to the industry and were too academic.

- All college representatives stated that they kept in touch with a range of employers to keep up to date. Most of them felt that the students were given a firm understanding of theory and principles together with realistic expectations of the industry. Most also felt that the courses motivated students: it was the industry which de-motivated. Courses tried to anticipate future demands in the industry and this inevitably led to some degree of mis-match of the courses and the employers' needs.

The divergence of opinion expressed stresses the need for still closer links between employers, educationists and students to improve the preparation of young people with potential for supervisory and management positions in the industry.
The purpose of this study of unskilled workers aged 16 to 25 was to provide a basis for planning adult training as part of an active employment programme. Unskilled workers are defined as persons doing jobs requiring less than 6 months' informal training on the job. They make up around 30% of the total work force (28% of the men, 33.5% of the women). Their part of the total increases with rising age. The study is based on a sample of 1,000 unskilled workers who replied to a questionnaire and were interviewed according to a standard schema relating to family and job situations, and individual intelligence, aptitudes and motivation.

Educational status and social background. With regard to their training, 41% of the sample had not taken any formal training after leaving school, 34% (male 42%, female 26%) had interrupted their course of training and 25% (males 31%, females 19%) had changed occupation after completing training. Among those who had no training, 32% said the reason had been that they wanted to earn money fast, 18% did not want to, 10% had not done well enough at school for getting an apprenticeship and in 17% of the cases the parents had advised against it. Around 34% of the young unskilled workers have parents at about the same (unskilled or semi-skilled) job level but 56% had parents with a higher job status. About 66% of the girls (boys 34%) with unskilled-worker fathers took no training after school.

Jobs, job attitudes and job performance. Over 55% are engaged in jobs which are conditioned by the machines and tools used. More than 10% are engaged in jobs which, with regard to the investment level, should have trained workers as incumbents but they were not given opportunities for such training. Supervisors usually rate the work done by the unskilled as good to excellent. Only 3.4% get a negative rating. 'Supervisors'
ratings and job satisfaction (related to level of difficulty of the job, work environment, wage level, working hours) are positively correlated - over-all, job satisfaction is high. Satisfaction with pay levels is high among those working in low-wage occupations (mostly females), but low in the higher paid ones (mostly males).

Intelligence rating. The unskilled generally score low on intelligence: 85 on a scale averaging 100; 16% went to "special" classes at school or did not complete the basic school programme. However, 27% score average or higher on intelligence tests. The group as a whole scores low on linguistic and mathematical factors in the test battery, higher on visual and spatial factors which are of importance in many practical/technical tasks. Girls tend to score higher than the boys.

Motivation for training. Most unskilled workers (i.e. 57%) said they would like to get more training, but only 27% had ever attended a course and 25% of these dropped out before completing it. Most girls take commercial courses and hope to change occupation; boys take technical courses hoping for promotion. Half of the girls are not interested in further training: their aim is to get a husband and children and they are saving money for their "hope chest".

Implications for guidance and training. More intensive and individualised vocational guidance is needed to decrease the training drop-out rates and the rate of occupational change after training. Girls (and their parents) need guidance to become better motivated for going into training after leaving school. As the unskilled have had little intellectual training (e.g. low scores on reading) and tend rather quickly to get tired of training and to give up training, programmes should be subdivided in shorter phases. Block daytime courses lasting a few weeks and having direct application to the job seem best for this group of workers. Training modules should be recognised by the training authorities. Technical courses should be adapted to suit the girls better. Special retraining courses should be organised for young people who, having completed training, subsequently take employment in other occupations; the change would thus be facilitated without loss of status for the worker.
The objective of the study was to explore the nature of different occupations and work situations (including remuneration and other conditions of work) and of educational and other job requirements. The study was based on interviews (in 1970–71) with 666 workers in 17 firms in the chemical (5), printing (6), and engineering (6) industries supplemented by interviews with their superiors. Representativity was sought only as regards the levels of production technology applied – manual with mainly hand tools, mechanised, automated – and operational complexity.

Findings

Batch and process production involve workers in predominantly supervisory, control and regulatory functions; such functions are negligible in other forms of production (unit, mass, repair, maintenance). Technology levels are mixed in most work situations. High variation and autonomy ratings (which are positively correlated) are found in individualised jobs; most jobs in batch and mass production have low variation-autonomy ratings. But job characteristics such as responsibility linked with control of costly equipment, inter-control within teams, and having frequently to work within strict time limits, vary independently of variation-autonomy factors.

High levels of social contact are found in jobs with high variation-autonomy and in work team situations, low levels on monotonous and dependent tasks.

Skilled worker qualifications are required primarily in departments with individualised production (lithographer, compositor, auto-repair mechanic, maintenance worker), rarely in production work and not at all in process production. Existing entry requirements derive largely from political factors and tradition. Many chemical industry jobs were rated as very complex but no skilled-worker level exists in this industry, although one
firm - an oil refinery - had an elaborate training course for its process workers.

Among skilled workers, 82% felt they applied much or at least some of what they had learnt as apprentices. But workers in mass production, in printing and in various production jobs in engineering are often overqualified.

Workers, and in particular supervisors, frequently record human or social qualities (co-operation, responsibility, attention, precision) among qualifications required. Arithmetic and verbal ability (both written and spoken) are required in most non-routine jobs, particularly in automated processes.

Foreign languages are mainly required in repair and maintenance.

Workers and supervisors agree that on 60% of the jobs the workers need no further training. Of the remaining 40% they disagree almost totally as to what the training needs actually are and which workers need training.

There is a potential conflict in that workers' views on further training differ from those of supervisors and management. Workers who feel that they need more training tend not to be given it and managers offering training to unwilling workers will feel frustrated. Training officers and others responsible for training should look into this matter.

Job titles are generally useless as indicators of job content: better job descriptions and a re-classification of jobs are needed for both research and statistical purposes.

Conclusion

Many current predictions regarding the evolution of job characteristics are unfounded. Most jobs are now easy to learn but heavy and demanding as regards physical and mental endurance. They will continue to be so.

Differentiation in technology has been followed by differentiation in qualification requirements - a more flexible training system is needed, one providing basic training followed by off-the-job specialisation courses and, finally, training for specific types of work to meet the needs of individual jobs.

Training should not only provide job skills but also equip workers with an understanding of industrial processes, financing and organisation, and ability to co-operate and communicate (including, for some, in a foreign language). This would make it possible for workers to reach a higher level of control over their working lives.
Upward mobility, with emphasis on advancement for low-wage groups, occurs in many different ways. For example, workers have been described as upgraded when they receive single or multi-step promotion; when a revision of job structures results in upgrading; when improvements in job skills or qualifications increase chances of eventual promotion.

The Federal Government has funded a great variety of research and demonstration projects along these lines in an attempt to accelerate the advancement of low-paid workers, particularly those from disadvantaged and minority groups. So far, the major part of public expenditure has been used for single-step upgrading projects. Such projects attempt to move workers up from entry-level position to jobs one notch higher in status, skill requirements and pay. Smaller firms have been more receptive to such projects, primarily because larger firms are more likely to provide either formal or informal training and have a system for moving workers up in the job hierarchy as they require skills at higher levels. However, follow-up studies have failed to show any long-range benefits resulting from these projects and there is no evidence to show further upward mobility on the part of the trainee.

Compared with single-step projects, few multi-step attempts have been made to upgrade employees to significantly higher positions. What experience there is, however, shows that multi-step training for a sequence of intermediary jobs is more feasible than a direct jump to the target job, as this often demands more of a trainee than realistically could be expected.

One of the problems with upward mobility is that promotion ladders do not always have evenly spaced upward steps. Projects concerned with career progression systems have attempted to fill in missing rungs by unlocking narrowly defined seniority and promotion paths, redesigning...
jobs and constructing career tracks that permit lateral as well as upward mobility. These projects challenge a company's hierarchical status quo and more often than not run into opposition.

On the whole, government sponsored projects to upgrade the skills of the work force have led to very few firm conclusions about the best way to tackle the problems involved. Moreover, the results of individual projects using different approaches to upgrading have been mixed. Some have worked, some have not. Widely different results have been produced by similar upgrading approaches in firms with almost identical occupational ladders. In these cases, variables such as management attitudes or the provisions of the collective bargaining agreement may have been more significant than occupational structure. Mixed results emphasise the importance of tailoring all upgrading projects to the highly specific needs of individual firms.

Despite the lack of positive findings, federally sponsored projects have generated a considerable body of evidence about the wide range of methods available to promote upward mobility. Hopefully it will offer guidelines for future attempts to open more high level jobs to minority groups, women and disadvantaged persons generally. It is clear, however, that the combined resources of Federal, state and local agencies are insufficient to supply direct services at each worksite.

Continued, publicly-funded experimentation may well achieve a more efficient use of resources by developing advisory, diagnostic and training services and by encouraging employers to make use of these services as required. Since workers' upward mobility depends largely on opportunities within their firms, it is important to identify any barriers to upward movement. Apart from incentive payments to employers to upgrade designated workers, and assistance in making cost/benefit analyses of upgrading measures, such services could also include advice on developing new career ladders and job enrichment programmes.
Education and working life in modern society


Report on the changing relationship between the educational system and working life; equality and mobility; options for the individual within a free-choice society; mechanisms for industry/education consultation; conclusions and recommendations.

This booklet sets out proposals put forward by a Group of Experts on Education and Employment set up by OECD. The mandate of the Group of Experts was to survey the relations between the educational system and working life in the light of the social objectives in OECD countries in the 1970's. The text of the report indicates attitudes and policies that may advance thinking on the complex interplay of relationships between education and work. Countries will view the proposals from different points of view. But all need to make a major effort to establish new and more effective methods of co-operation between the world of education and the world of work. The main proposals are summarised below.

- Individual development and human satisfaction must become a responsibility of the world as well as of education. Action towards that end should include: the development of more clearly defined criteria for job assessment, merit reward and salary scales; job enrichment; increasing flexibility of work and careers, and in the organisation of the working day and week; greater worker participation in decision-making; and the provision of opportunities for career development and training on a more equitable basis. The public sector, in its recruitment and promotion policies should take the initiative in this area.

- As a parallel development there should be a more "integrative policy for education", particularly through recurrent education, so that more students may work and more workers may gain additional education. The development of such a policy should become a major priority for government policy. It could be backed by a fund to which both governments and enterprises contribute.

- At the same time there should be greater opportunities for the disadvantaged including women and minority groups. Many of the disadvantaged are young people, especially those with limited education and
and employment experience. From the viewpoint of both economic efficiency and social equity, society has a special responsibility to provide a coherent and satisfying range of education, work and service opportunities for young people between the end of compulsory schooling and the beginning of adult life. The solution does not lie only in the provision of ever-lengthening full-time education for all. Policies should provide better opportunities for alternating and mixing education and training with work. For those who stay at school, there would be a diversified system of secondary education with opportunities for combining academic study with practical experience in society. Those who work should have access to training and education, so as to diminish irreversible social selection. This entails strengthening the rights of young workers to educational leave, the introduction of some modern form of apprenticeship, the creation of more part-time and temporary job opportunities, increased co-operation between education and industry, improved educational grants and income maintenance.

- For people of all ages, there should be more flexible rules enabling them to move between (and within) education, work and leisure. People should have as much freedom as possible in organising life patterns and unnecessary conformity should not be enforced by regulations. This is a major area for joint study by governments, unions and employers in an attempt to decide what underlying institutional arrangements will be needed to make greater flexibility possible.

- Because the national situations in the OECD countries are so different, it is not possible to make specific recommendations on financing. However, as in virtually all OECD countries, patterns of educational finance have grown haphazardly, there is a need for a fundamental review of existing financial mechanisms. The major issue at stake is to arrive at a system which is based on both equity and efficiency i.e., on a sound assessment of the private and social benefits of education, a proper sharing of the costs between the private and public purse.
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