EDUCATION AND WORK

TECHNICAL AND VOCATIONAL EDUCATION

by ALEXANDER DYANKOV

1. BACKGROUND AND INTERAGENCY CO-OPERATION

One of the major goals set for education in the very early days of UNESCO was to make learners understand the scientific and technological aspects of contemporary civilization so as to comprehend their environment and be prepared for the world of work. Aiming to enhance relationships between education, working life and the community as a whole, technical and vocational education was seen as part of lifelong education adapted to the needs of each country.

At the time UNESCO was created, during the years after the Second World War, many national educational authorities oriented their education systems towards a general technical and vocational initiation under different forms and names, such as 'industrial arts', 'polytechnical education', 'technical orientation', 'elementary technology', 'pre-vocational education', etc., most frequently introduced at the lower secondary level, containing elements of occupational orientation and practical skills training.

Various United Nations specialized agencies concentrated their efforts to promote human resources development in their fields of competence. While UNESCO oriented itself to technical and vocational education, the International Labour Organization (ILO) focussed on technical and vocational training, which is usually specialized in nature and more practically oriented than 'technical and vocational education'. This type of education is usually provided within the education system, but may also be conducted through non-formal means, and is designed to impart broad technical knowledge and develop essential skills for specific occupations.

Having divided between themselves their respective fields of competence (education and training), the two sister agencies concluded a “Memorandum of Collaboration between the ILO and UNESCO in matters of Technical and Vocational Education and Related Matters” in October 1954, which cemented their fruitful co-operation in the years to come by jointly executing many 'field projects' in developing countries, where their experts worked together, each in his/her specific field with the common ultimate goal of making themselves 'redundant' by building up national capacities while working together in teams with national specialists who would be able to continue their work, initiated with the launching of these projects.

In the 1950s and 1960s UNESCO provided technical assistance by implementing numerous such 'field projects' in close co-operation with other United Nations specialized agencies besides ILO: the Food and Agricultural Organization (FAO), the United Nations Industrial Development Organization (UNIDO), etc. Most of these projects were funded from various extra-budgetary sources, like the World Bank, the United Nations Development Programme (UNDP), the Asian Development Bank, African Development Bank, the Islamic Bank, and some other foundations and Non-governmental organizations (NGOs), while some countries, rich in natural resources, funded such projects themselves, receiving only the technical expertise of international experts and consultants.
At the same time, within UNESCO itself the responsibility for administering activities in the field of technical and vocational education were divided according to the level of education, so that the higher (also called tertiary or engineering education) went under the Science Sector, while the ‘vocationalization of general education’, the technical and vocational education at secondary and post-secondary (sometimes referred to as ‘technician’) level, as well as technical teachers preparation remained with the Education Sector.

The first UNESCO pioneers in the sector of education gave direction to technical and vocational education towards improving the quality of life by permitting each individual to expand his intellectual horizons and to acquire and constantly improve professional skills and knowledge, abolishing any barriers between levels and areas of education, between education and employment, and between school and the world of work through:

• integration of technical and vocational education and general education in all educational streams above primary level;
• creation of open and flexible educational structures;
• taking into account the individual's educational needs and the evolution of occupations and jobs in line with scientific and technological development.

2. NORMATIVE ACTION

The first UNESCO normative document in this area was the “Recommendation concerning Technical and Vocational Education”, adopted by the General Conference of UNESCO at its twelfth session in Paris in December 1962. It became an effective instrument for development of various aspects of technical and vocational education, including educational and vocational guidance and counselling, development of curricula and instructional materials, design and supply of physical facilities, including prototype laboratories, workshops, as well as the acquisition, proper use, storage, maintenance and repair of the necessary machinery, equipment and tools. At the same time UNESCO became a forum for exchange of experience in various methods of teaching, evaluation and active co-operation between educational institutions and industrial, commercial and agricultural enterprises.

Scientific and technological developments in this field were so rapid, that at its seventeenth session in 1972 the UNESCO General Conference recommended a revision of this normative instrument. Thus, a “Revised Recommendation concerning Technical and Vocational Education” was prepared in collaboration with ILO and adopted at the eighteenth session of the General Conference of UNESCO in November 1974. Soon it became a major tool, setting forth general principles, goals and guidelines for each individual country, according to needs and resources, enhancing the countries' preparation of technical manpower, and UNESCO undertook the task of regular, periodic monitoring of the results of its implementation in all Member States.

Following a resolution, adopted by the General Conference of UNESCO at its twenty-third session in November 1985, the Executive Board approved a questionnaire requesting Member States to report on measures taken to implement the “Revised Recommendation”, focusing on nine particular areas:

• Objectives of Technical and Vocational Education (TVE);
• Policy, planning and administration of TVE;
• Technical and vocational aspects of general education;
• Technical and vocational education as preparation for an occupational field;
• TVE as continuing education;
• Educational and vocational guidance;
• Methods and materials in the teaching and learning process;
• Recruitment and preparation of teaching staff; and
• International co-operation in the field of TVE.

A total of 44 countries responded to this questionnaire, and a report summarising their responses was presented to the General Conference at its twenty-fourth session in November 1987, which approved and disseminated the report, recommending that the next consultation with Member States on the progress of the implementation of the “Revised Recommendation” be conducted in 1991.

Consequently, a second questionnaire was prepared in 1989, which was more selective, aiming a more in-depth analysis, and it focussed on six major areas of concern:
• Vocational guidance;
• Technical and vocational education for girls and women;
• The role of technical and vocational education for rural development;
• Promotion of co-operation between TVE and industrial enterprises;
• Professional preparation of teachers for TVE; and
• Strengthening of international co-operation in the field of TVE.

A summary of the 55 countries’ responses to the second questionnaire served as a basis for a “Synoptic analysis” which was reported on to the Executive Board in April 1993 and presented to the General Conference of UNESCO at its twenty-seventh session in November 1993. Adopting the report of the Executive Board, the General Conference recommended that periodic reporting on the progress of the implementation of the Revised Recommendation on TVE be further continued, and the third questionnaire is to be prepared in 1997, to gather information for the thirtieth session of the General Conference in 1999.

Besides the Revised Recommendation on TVE, a second normative document, entitled “Convention on Technical and Vocational Education”, paying special attention to the diversity of education systems and socio-economic and cultural conditions (in particular those in developing countries, which need special considerations and provisions), was adopted by the General Conference of UNESCO at its twenty-fifth session in November 1989, which has been ratified to date by 11 Member States. It is anticipated that many more countries will ratify this Convention, which is considered as an ‘umbrella' document of very basic principles, while the Revised Recommendation provides more detailed guidelines for national legislation at operational level.

3. DECENTRALIZATION OF TECHNICAL CO-OPERATION

In the meantime, with the tendency to decentralize of its activities, UNESCO has transferred some of the responsibilities for implementing TVE programmes to the established Regional Offices for Education. New initiatives, emerging at regional level, promoted inter-country co-operation as the basis for Technical Co-operation among Developing Countries (the TCDC principle), which gradually replaced the previous role of UNESCO as an executing agency for many in-country projects. In place of the former practice of ‘UNESCO experts being sent to the field’, (which was popular between 1950 and 1970), UNESCO started to promote international co-operation through mutual exchange of experience, resource persons and other co-operative actions. One such successful endeavour was, for example, the Asian Programme of Educational Innovation for Development (APEID), in which technical and vocational education was one of the active areas of innovation. Similar regional programmes emerged in Africa, Latin America, the Arab States and the countries of Eastern Europe.
4. THE UNEVOC PROJECT

The latest UNESCO endeavour in this area is the establishment of the International Project on Technical and Vocational Education ‘UNEVOC’ which was launched in August 1992. The idea to create this project emerged at the First International Congress of Technical and Vocational Education, organized by UNESCO in Berlin in 1987. During the Congress it was suggested that: "...UNESCO should support the establishment of an international centre for research and development in technical and vocational education." Based on the suggestion put forward at the 1987 Congress, and following a recommendation of the Executive Board at its 131st session in 1989, the General Conference adopted at its twenty-fifth session in 1989 a resolution inviting the Director-General: "to carry out a feasibility study on the establishment of an international centre for technical and vocational education." On the basis of the feasibility study undertaken by UNESCO the twenty-sixth session of the General Conference adopted a “Resolution for the establishment of UNEVOC Project”, pursuing the following objectives:

- fostering the international exchange of ideas, experience and studies on policy issues;
- strengthening national research and development capabilities;
- facilitating access to data bases and documentation;
- promoting innovations in staff development; and
- supporting international co-operative actions.

The UNEVOC Project is governed by an Advisory Board and the implementation of the project activities is co-ordinated by the Secretariat of the project which is the Technical and Vocational Education Section at UNESCO Headquarters, through the UNESCO Regional Offices for Education in Asia and the Pacific, Africa, the Arab States and Latin America. Most of the European project activities and some of the inter-regional actions are implemented by a Project Implementation Unit, located in Berlin. At the so-called ‘grass roots level’, the activities of the project are carried out by a Network of UNEVOC National Centres and Associated Centres.

The financial resources for funding of the project activities and running costs are provided by the UNESCO Regular Programme budget, voted by each session of the General Conference, and sponsored by special allocations from the Governments of Germany, France, the Republic of Korea and Japan. The German contribution provided 50 per cent of the project budget during the biennium 1993-95 and the present biennium (1996-97), as well as logistic support for the Project Implementation Unit in Berlin, while the Governments of France, the Republic of Korea and Japan provided the services of UNESCO Associate Experts, working at the Secretariat in Paris, and also hosted some major project activities, organized in France, Japan and in the Republic of Korea.

The principles behind UNEVOC are based on the participating Member States developmental goals and human resources development policies, taking due account of changes in science and technology. UNEVOC is a co-operative endeavour of Member States sharing a common need to further develop and improve their technical and vocational education, linking education to the world of work.
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