



**Higher College of Sciences  
and Techniques of Tunis**



# **International Symposium on the Development of ICT- based teaching and learning methods in Technical and Vocational Education (TVET)**

**Tunis, November 20-22, 2006**

**Final Report**

**Summary**

Tunis, December 2006

## **Organizers:**

- **UNESCO Regional Bureau - Beirut**
- **UNESCO- UNEVOC International Center - Bonn**
- **Tunisian National Commission for UNESCO**
- **Higher College of Sciences and Techniques of Tunis (ESSTT)**

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# **I. ORGANIZATION OF THE SYMPOSIUM**

## **1. Introduction**

The representatives of the peoples of the World declared, during the World Summit on Information Society held in Geneva (December 10-12, 2003) and Tunis (November 16-18, 2005) their "common desire and commitment to build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life, premised on the purposes and principles of the Charter of the United Nations and respecting fully and upholding the Universal Declaration of Human Rights".

The UN supported world summit was held within the framework of a series of events concerned with the impact of Information and Communication Technologies (ICTs) on today's world. Many development actors at the international level have identified the importance of ICTs in the field of education and have therefore adopted the issue. The International Conference on ICTs for Development, Education and Training in Africa was organized for the first time in Addis Ababa, Ethiopia (May 24-26, 2006) and was supported by international organizations such as UNESCO. The main objective of the Conference to which took part the private sector was to establish distance education/ e-learning spaces in Africa and elsewhere. It is to be noted here that the application of ICTs in TVET is part of the TVET-UNEVOC workplan for the year 2006-2007 at the international, regional and national levels.

Thanks to its institutes and centers, UNESCO plays a major role in the inclusion of ICTs in education and learning. It has, for instance, established an Institute for the Application of Information Technologies (IITE) in Moscow in 1997.

The use of ICTs in TVET remains limited in many regions of the world. It is therefore necessary to develop it. To this end, many topics are to be tackled such as capacity-building, access and connectivity, localization, personalization and content development.

Consequently, the inclusion and use of ICTs in TVET constituted one of the seven projects proposed by the Committee during the TVET-UNEVOC Regional Experts Meeting (Amman, August 1-3, 2005) organized by UNESCO Regional Bureau in Beirut and UNESCO- UNEVOC International Center in Bonn, in collaboration with the National Center for Human Resources Development in Jordan. On the other hand, the application of ICTs in education and learning constituted a major topic during the G8-MENA Meeting for Ministers of Education held in Sharm el-Sheikh, Egypt (May 23-24, 2006).

UNESCO Offices in Beirut and Rabat and UNESCO-UNEVOC International Center in Bonn organized, in collaboration with the Tunisian National Commission for UNESCO and the Higher College of Sciences and Techniques of Tunis (ESSTT), the International

Symposium on the Development of ICT- based teaching and learning methods in Technical and Vocational Education (TVET) to serve TVET institutes/centers in the Arab region.

## **2. Objectives**

The objective of the symposium was to guide TVET institutes/centers in the Arab region in the preparation and development of strategies aimed at including the use of ICTs in TVET programmes and curricula, according to the following mechanisms:

1. exchange of innovative experiences and best practices;
2. identification of potential information resources to support technical cooperation;
3. development of national and regional strategies.

## **3. Themes**

The symposium tackled the following themes:

- **Theme 1** : The Use of ICTs in TVET;
- **Theme 2** : The role of TVET teachers and trainers in the development of ICTs and their applications;
- **Theme 3** : The promotion of ICTs infrastructures within TVET institutions.

## **Reference documents used during the symposium**

The organizing committee entrusted three experts (2 from the Arab World and one from France) to prepare three main working papers on the above three themes. The first paper on the "Use of ICTs in TVET" was hence prepared by Professor Mohamed JEMNI from Tunisia, while the second paper on the "Development of TVET Teachers Education and Training on the Use of ICTs" was prepared by Mr. Aboubakr Abidun BDAWI, PhD, from Egypt. The third paper on the "Environment of ICT-based Training Activities", was, for its part, prepared by Professor Gérard Michel COCHARD, from France.

## **II. WORKING SESSIONS AND DISCUSSIONS**

### **1. Work Methodology**

The symposium was divided into plenary sessions (opening session, procedural session, and closing session) and workshops (three workshops spread over three days).

- **Participants**

- Thirty five participants took part in the symposium, including specialists/experts from the Arab countries, representatives of TVET-UNEVOC institutes/centers and regional and international organizations concerned with ICTs and TVET as well as representatives of the private sector.

- **Results and Recommendations**

The working groups analyzed and discussed the above-mentioned three themes. They mainly reflected on the following main issues:

- problems,
- challenges,
- priorities,
- coordination and cooperation mechanisms,
- actors, partners and beneficiaries.

At the end of the symposium, the participants issued the following recommendations:

- a. At the UNEVOC institutes and centers level**

- Establish a network of Arab experts from UNEVOC centers and nominate a pilot center for technical and vocational distance education and training.
- Encourage UNEVOC centers to assist countries in the establishment of strategies and programmes for the development of ICTs use in education.
- Encourage UNEVOC centers to establish a system aimed at storing, using and publishing educational tools available in Arabic.
- Encourage UNEVOC centers to reinforce their role at the national level as well as in terms of bilateral and regional collaboration for the exchange of experiences.
- Establish a portal for the UNEVOC Centers Network allowing the access of all concerned persons (trainers and students) to the different databases.

- b. At the regional and international organizations level**

- Encourage the linkage between regional efforts and international networks in view of establishing common networks.
- Detect success stories and publish useful results.
- Encourage the exchange of expertise between Arab States.

- c. At the private sector institutes level**

- The private sector institutions are invited to help and support UNEVOC centers in the implementation of initiatives aimed at consolidating the role of ICTs in TVET.

**Suggestions related to future actions were also made by the participants:**

- Develop training of trainers programmes in collaboration with the different UNEVOC centers.
- Encourage the private sector to invest in digital production in partnership with education and training public institutions.
- Call upon the consultation committee of UNEVOC centers in the Arab countries to follow-up the symposium's outcomes in relation with other relevant programmes such as the project G8- MENA.

**Assessment of the symposium**

At the end of the symposium, an assessment questionnaire was distributed to the participants who were requested to give their opinion regarding a variety of issues. Only thirteen participants filled in the questionnaire.