Challenges of
TVET in Arab Countries

Innovation through E-Learning

Documentation: Regional Conference in Amman 12th – 13th October 2009

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On 12-13 October 2009, a conference entitled "Challenges of TVET in Arab Countries – Innovation through E-Learning" was held in Amman, Jordan.

Around 135 experts from 13 Arab and European countries participated in the conference, which was organised by InWEnt – Capacity Building International, together with the European Training Foundation (ETF), UNESCO-UNEVOC, and partner organisations from Egypt (Productivity and Vocational Training Department) and Jordan (Vocational Training Corporation, National Center for Human Resource Development).

During the conference, the Internet-based "TVET-Portal – The Arab Gate to TVET" was launched. This portal was developed and implemented by participants of a long-term InWEnt training programme that took place in Germany. The portal is in Arabic and English and aims to support TVET professionals (managers, teachers, instructors, etc.) in all Arab countries. It offers a variety of relevant information as well as possibilities for discussion and communication amongst its users.

In plenary and working group sessions during the conference, multiple issues concerning the implementation of e-learning in TVET were discussed, including e-didactics, open source software, teacher training and many others.

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Preface

The countries in the MENA region are facing numerous economic, social and environmental challenges – a globalising economy with growing interdependencies, intensive labour migration flows within the region and world wide, the demographic gift of a growing population with more than 100 Mio. of young people entering into the labour market throughout the next decades and a rocketing spread of new technologies in the fields of communication and information technologies.

Education and more specifically technical vocational education are recognised to be a key factor to convert these challenges into strengths for a sustainable development path. It is not only a key to competitiveness and employment at individual and corporate level, but also a key to social change.

Recognising that governments in the region are launching ambitious and wide spanning reform programmes for the TVET sector to fulfil its stimulating and supporting role in this process, the TVET sector in the MENA region is entering a period of substantial reforms and changes. To cope with this, new instruments and methods need to be developed and introduced to improve the quality in TVET and create new modes of delivery.

At the same time the ICT sector is one of the fastest growing sectors with a quickly expanding infrastructure, becoming a key technology for other sectors and providing a growing number of employment opportunities.

E-learning in this context can stand for a paradigm shift in TVET towards systematic and continued teacher training, mainstreaming the concept of lifelong learning in TVET and promoting regional cooperation.

In industrialised countries in the meantime e-learning is fully recognised as part of a range of methodologies applied in education namely in the context of the requirements for continuous and lifelong learning.

InWEnt with its learning management platform GC 21® and in the context of various TVET related projects, ETF in the context of its MEDA ETE programme, UNESCO UNEVOC through its UNEVOC e-forum and TVETipedia are pioneering the spreading and wider application of e-learning in the MENA region. Throughout the past 5 years a strong cooperation and many joint activities were developed between these organisations and numerous TVET institutions in the MENA countries (Algeria, Egypt, Jordan, Lebanon, Palestine, Syria, Tunisia) to develop the competencies in this respect and to make it an integral part of TVET reforms towards

higher quality, improved labour market orientation and increased efficiency.

The conference has been organised to bring together accumulated expertise in the region and from EU countries to create awareness among decision makers in policy, businesses and public administrations about the achievements already made, its potentials for the improvement of quality in TVET through innovative methods and instruments for teacher training, the application of e-learning in TVET, new forms of learning through learning communities and communities of practice.

InWEnt as an organisation of international cooperation seeks to contribute towards a secure and sustainable future. We are convinced that – with the joint efforts of all participants – a sustainable global development can be achieved. InWEnt's activities are people-oriented because people are those who drive change. Without individual learning, there is no learning organisation and no social change towards sustainability.

Dr. Klaus Bader-Labarre
InWEnt

Introduction

The Technical and Vocational Education and Training (TVET) sector in Middle East and Northern Africa (MENA) countries is entering a period of substantial reforms and changes. At the same time the Information and Communication Technology (ICT) sector is one of the fastest growing areas today. Its fast expanding infrastructure is becoming a key technology for other markets, providing considerable growth of employment opportunities.

To cope with these challenges, new instruments and methods need to be developed and introduced to improve the quality in TVET.

IT-based learning represents a great opportunity and in this context e-learning stands for a paradigm shift in TVET towards:
– Systematic and continued teacher training to enable working with rapidly changing technologies
– Mainstreaming the concept of life-long learning in TVET
– Promoting the cooperation among TVET providers in the region.

ICT has gained increasing importance over the past decades as a factor in the overall economy and in the sphere of education and training. In Arab countries the IT infrastructure is rapidly growing and many governments are highly emphasising the spreading of these technologies and its applications in different sectors. VET institutions are facing the dual challenge to satisfy industry demands for a diversified range of specific IT related professional skills and to integrate ICT into their organisational structures and pedagogical concepts. This is a highly complex undertaking requiring the combination of IT related, pedagogical and organisational skills.

The use of ICT offers a wide range of opportunities to TVET providing institutions to increase the efficiency and effectiveness of their services. Furthermore it poses challenges in terms of technological, methodological and didactical know-how to the institutions.

To face these challenges, InWEnt – Capacity Building International – has implemented a long term training programme for professionals in TVET. This programme intends to strengthen the capacity of VET institutions to develop, plan and implement adapted IT based e-learning solutions. It is offering support to build up capacities by filling the gap between the technological know-how (hardware infrastructure, software) and methodological pedagogical know-how for the development of ICT based training contents. The use of ICT in the context of this programme encompasses a variety of options including Computer-Based-Training-Programmes (CBT), Web-Based-Training-Programmes (WBT), internet based online-seminars etc. to plan, develop and implement such programmes.

One of the most important parts of this programme was the "transfer project". During the training phase in Germany each participant had to elaborate a project that was intended to be implemented after the return to his/her TVET institution. The idea behind this procedure was that the training programme should not be a "stand-alone" measure but it must be interlinked with the institution of participants and its respective strategy in the field of e-learning. The ideal case is that a participant returns to its home country as an "E-Learning Manager" becoming responsible for the implementation of e-learning in his institution, beginning with the implementation of his own transfer project.

The main focus of the transfer projects was the conception and planning of an internet-based portal for TVET professionals to provide information, communication, collaboration, and e-learning.

On 12-13 October 2009, a conference entitled "Challenges of TVET in Arab Countries – Innovation through E-Learning" was held in Amman, Jordan. During this conference the Portal had been launched as "TVET Portal – The Arab Gate to TVET".

The present publication gives a detailed overview of all contributions on this conference and intends to enrich the discussion about the use and implementation of e-learning methods and tools in TVET.

We would like to thank all speakers and participants of this conference for their contributions in the plenary discussion as well as in the numerous sessions of the conference. Last but not least many thanks are due to the funding organisation InWEnt – Capacity Building International and the responsible senior project manager Dr. Klaus Bader-Labarre and his efficient colleagues Ms. Violetta Wrzesinska and Ms. Sabrina Fath.

Uwe Wieckenberg
E-Learning Consultant on behalf of InWEnt

I. Opening Speeches

In his opening speech, his Excellency Mr. Ghazi Shbeikat, Minister of Labour of Jordan, emphasised the need for labour market orientation of vocational training to fight the high rate of unemployment in Jordan. He pointed out the important role of information and communication technologies (ICT) and e-learning play in this regard.

Dr. Luiz Ramalho, Director of the Department of Sustainable Development of InWEnt, highlighted the successful cooperation between InWEnt and the private sector and stressed the importance of integrating issues of sustainability into TVET systems.

H.E. Majed Habashneh, General Manager of VTC, pointed out that the development of training quality has to be continuous and that systematic training of trainers and teachers will contribute to raise their efficiency to achieve the principle of lifelong learning in education and e-learning beside strengthening regional cooperation in order to be consistent with the principle of labour immigration among countries.

Moderator Mr. Egon Fleischer and H.E. Mr. Ghazi Shbeikat

H.E. Ghazi Shbeikat

Minister of Labour of Jordan

Your Excellencies
InWEnt Representative
Ladies and Gentlemen

Good morning,
I am pleased and honoured to welcome, from around the world, the distinguished guests and experts in their second home Jordan, who are participating in this conference and who are concerned with the vocational education and training in particular with e-learning. Jordan represented by His Majesty King Abdullah II, and the Jordanian Government believe in the importance of regional and international cooperation in all areas of life; economic, social and political.

Ladies and Gentlemen,
I am pleased today to open the Conference of **"Challenges of TVET in Arab Countries- Innovation through E-Learning"**, organized by InWEnt in cooperation with the Vocational Training Corporation and others. One of the roles of this Conference is to enhance the efficiency of workforce productivity in Jordan – in particular in the field of technical, vocational education and training, which will be reflected positively on the Jordanian economy.

Ladies and Gentlemen,
Jordan's economy focuses on improving its competitiveness in order to maintain its economic growth and ability to compete regionally and internationally. One of the methods of competing is to improve the quality of the labour force, hence the e-government program initiative in Jordan emerged as a national program launched by His Majesty King Abdullah II Bin Al-Hussein, which aims at improving traditional government performance in terms of services offered and delivery on one hand, and the efficiency of performance and accuracy on the other hand. In addition to time and cost effectiveness required to complete government procedures (in other words, the overall objective of e-government is to achieve efficiency, transparency and better performance of the government and its staff and change the prevailing stereotypes).

The biggest social challenge facing Jordan and the Arab world is employment. Here in Jordan, the unemployment rate, up to the middle of this year, reached 13%; that percentage is considered lower than the previous eight years, which was 15%.

I would like to remind the audience of the rate of illiteracy in Jordan, it has fallen to 7.3%, while the percentage of the population employed, until the end of the first half of this year, increased and reached 35.8%.

Jordan is also aware of the importance of technical and vocational training to fight unemployment, as the Government has developed programs and projects at various levels with the private and the public sectors, bearing in mind that some of the initiatives have created jobs for Jordanians in several areas, including hospitality, tourism, pharmaceuticals, in addition to, water, environment and construction sectors.

The subject of this conference is of great importance in the Arab world; as it offers a strong drive to the challenges we are facing and can upgrade and diversify the economies of Arab countries.

This conference, which you are participating in today, is the result of a Joint Cooperation between the Jordanian Government and the German Government. You will be listening to a variety of papers that talk about the challenges of TVET in Arab countries as well as e-learning; the new approach includes dialogue and debate within each group to come up with fruitful and pragmatic results.

I do hope you will achieve the desired objectives of this conference, where you will enrich each other by exchanging your scientific and practical views and experiences in order to accomplish the objectives set by the organisers, to benefit participants and Jordan's goals.

At the end of my speech, I would like to express my appreciation to the Director General of the Vocational Training Corporation, Mr. Majed Habashneh, InWEnt, the other sponsors, and the countries participating in the conference. I take this opportunity to welcome the participants again and wish them a pleasant stay in their country Jordan.

In the name of Allah, I declare the opening of this conference and do wish you all good luck in your efforts and work to achieve the outcomes set by all organisers.

Dr. Luiz Ramalho

Director of the department for sustainable economic development, InWEnt, Germany

Ladies and Gentlemen,
I am delighted to speak to you all on behalf of InWEnt – Capacity Building International – on the occasion of the opening ceremony of this conference dealing with the important issue of e-learning in the context of Technical and Vocational Education and Training.

As an organization of international cooperation, InWEnt seeks to contribute towards a secure and sustainable future. We are convinced that – with the joint efforts of all participants – a sustainable global development can be achieved. Our Capacity Building activities through human resource development represent our commitment to this endeavour.

Regarding this overarching mission of our work, we have learned in the various decades of InWEnt's work and those of its predecessor organisations that sustainable economic development and global growth needs well-trained people, competent institutions and mutual learning processes between industrialized countries and developing countries, and secondly, that access to knowledge is increasingly becoming the key to development, growth and the achievement of the MDGs,

Therefore, InWEnt has kept a strong focus on cooperation with the private sector worldwide. The strategic importance of business partners – not only in TVET programmes – is reflected by the fact that almost 60% of our activities are business-oriented and directed towards small and medium-sized enterprises, business associations and chambers of commerce. Additionally we cooperate with the private sector in the framework of Public Private Partnerships.

We also believe that the growing importance and global power of the private sector assign them a growing responsibility for socially and ecologically responsible behaviour. In the last years corporations have assumed a key role in shaping the globalization process. But they also gained a strong self-interest in assuming a responsibility due to their need for:
– well educated, skilled, internationally trained and flexible employees, as well as
– stable market conditions
– a fair, transparent and secure Investment climate
– a positive image for their customers
– and the long-term availability of non-substitutable resources.

Therefore, it should be – and in many cases already is – the natural self-interest of the private sector to influence globalisation towards a more sustainable development. The integration of divisions

Dr. Luiz Ramalho, Dr. Klaus Bader-Labarre and H.E. Ghazi Shbeikat

for vocational education and training in the largest department of InWEnt – the "Department for Sustainable Business Development" – further highlights InWEnt's appreciation of the important role TVET should play in processes for promoting sustainable development.

The importance of education and, especially, technical and vocational education and training, for achieving sustainable development, cannot be under estimated. The upgrading of specialists is not only a key to competitiveness and employment at individual and corporate levels, as individuals are more likely to gain employment if they are better qualified and quality and economic efficiency of labour increase at the same time. But education and training are also keys to social change. Therefore, InWEnt's activities are people-oriented because people are those who drive change. Without individual learning, there is no learning organisation and no social change towards sustainability.

Involving those who promote change is, therefore, both the precondition for and the objective of the political focus and the methodological approach of our Capacity Building Concept. Vocational training plays a central role in achieving sustainability and it is therefore also central to the United Nations Decade of Education for Sustainable Development: TVET transfers the necessary know how and skills to people on how to shape occupational situations in which they are active players in ways that foster sustainable development.

Right now, we witness that there is again a growing demand for TVET by partner countries – not only from the LDC's – as well as a growing interest and "come back of TVET" on the international development agenda.

Consequently, I see plenty of room for better coordination, for increasing efficiency, and sharing our knowledge.

Therefore, efforts like this conference and previous activities to intensify regional cooperation between different actors of the TVET sector in the Arab speaking world for a sectoral exchange of experiences are of high relevance.

Many countries – including many Arab states – face the challenge of improving their TVET systems to meet the requirements of today's business for qualified labour and to enable people to get access to employment. Already the Arab Human Development Report of 2002 highlighted the importance of "effective Arab co-operation as one of the keys for dynamic development in the Arab world. This is true for human development in general and for building human capabilities through education in particular."

There is a need in many of these countries to correct a mismatch between output of the national TVET systems and the demands of business. Therefore, it is also duty and interest of the private sector – as outlined at the beginning of my speech – to foster its participation in the elaboration and implementation of new TVET systems and approaches.

The TVET sector in the MENA region is entering a period of substantial reforms and changes. These are driven by the demand from industrial and service sector enterprises as well as by the growing number of entrants into the labour market. To cope with these changes, new instruments and methods need to be developed and introduced to improve the quality in TVET and finding new modes of delivery.

Key aspects for quality improvement are systematic and continued teacher training to cope with rapidly changing technologies, to mainstream the concept of life-Iong learning in TVET and to promote regional cooperation to respond to the growing interdependence and migration flows of the labour force.

At the same time the ICT sector is one of the fastest growing sectors with a quickly expanding infrastructure, becoming a key technology for other sectors and providing a growing number of employment opportunities.

E-learning in this context can stand for a paradigm shift in TVET towards systematic and continued teacher training, mainstreaming the concept of lifelong learning in TVET and promoting regional cooperation.

In industrialised countries in the meantime e-learning is fully recognised as part of a range of methodologies applied in education namely in the context of the requirements for continuous and lifelong learning.

The conference provides a platform on recent developments in TVET in the region with regard to the improvement of quality in TVET and more specifically to innovative methods and instruments for teacher training and the application of e-learning in TVET with good practice examples on e-learning didactics, new forms of learning through learning communities, communities of practice and others.

I thank you for your attention and I hope that this event will become a milestone of a long-lasting and fruitful cooperation process which supports the VET institutions to cope with the challenges to respond adequately to the demands of the labour market and at the same time to enable an increasing number of young people to find employment.

H.E. Mr. Ghazi Shbeikat and participants of the conference

H.E. Majed Habashneh

General Manager of VTC, Jordan

In the Name of Allah

Your Excellency Minister of Labour / Chairman of the Vocational Training Corporation
Your Excellencies and Compassionate
Dear InWEnt representatives

Ladies and Gentlemen,
Good afternoon all, I am happy to be with you today, and I thank all of you for your participation in the official opening of the conference (Challenges of TVET in Arab Countries – Innovation through E-Learning) organized by InWEnt Capacity Building International on 12/13 Oct. 2009 in cooperation with the VTC Vocational Training Corporation and a number of local and international institutions such as NCHRD (National Center for Human Resources Development, Jordan), UNESCO, PVTD (Productivity & Vocational Training Department in Egypt).

Your Excellency Minister of Labour,
Ladies and Gentlemen,
I am pleased to welcome you, especially our guests, who came from different countries around the world and local institutions in both private and public sectors in Jordan to participate in the conference.

Ladies and Gentlemen,
This conference was the result of reforming and restructuring in the field of vocational training in the Mediterranean countries which was caused by the increasing demand of the industrial and service sector as well as by the diversity of different industries in the labour market. As a result of all these changes it became necessary to develop new tools and techniques to cope with these changes in terms of quality and mode of delivery.

Perhaps the focal point for the development of training quality is continuous and systematic training of trainers and teachers to raise their efficiency to achieve the principle of lifelong learning in education and e-learning besides strengthening regional cooperation in order to be consistent with the principle of labour immigration among countries.

Participants of the conference

Ladies and Gentlemen,
This conference is very important, because the directions of His Majesty King Abdullah II Bin Hussein, may God protect him, saw the development and preparation of human resources and skills in technical areas as a priority for the Jordanian government. Therefore the Vocational Training Corporation is interested in providing training services in Jordan through its institutes and training centers to meet the actual needs of the labour market.

Based on the visions of His Majesty the King, VTC has new reforming process of vocational education and training and developed also new methods and techniques used in the implementation of the training process through the integration of modern technology. During the conference VTC will provide a clear idea about this issue.

The conference will also try to show during the two days the latest developments in education and vocational training in the MENA Region, the improvement for quality of vocational and technical training in particular concerning methods and innovative tools in the Training of Trainers and the increasing demand for e-learning and technical education, through providing best practices for e-learning applications and educational curriculum in e-learning in the learning communities.

Participants of the conference

Ladies and Gentlemen,

The VTC (Vocational Training Corporation), under the guidance and support of the government, will have a major expansion through new programmes and activities to focus on improving the quality of training.

After 30 years since the beginning of the work in 1976 VTC is currently aiming to a comprehensive reforming plan for vocational education and training cooperating with the World Bank and the European Union. They are now working on implementing what has been approved for the development and reforming process of the institution in order to improve the performance and the quality of its training programmes according to the needs of the labour market and to raise the efficiency of the training in VTC. According to this plan VTC and coalition consists of three specialised organisations which have signed a cooperation agreement in the field of advisory services in order to improve and implement the rules and regulations which organise working for VTC to achieve financial and administrative independence to operate a new form of working effectively, including finance, human resources, management, and the independence of VTC as well as orientation through meeting the needs of the labour market for the training in accordance with a holistic perspective to ensure the exercise of administrative and financial decentralization. This will lead the reform and development into a rapid progress in the achievements of VTC according to a holistic perspective ensuring the exercise of administrative and financial decentralisation, where this will lead the reform and development to the rapid progress in the achievements of the institution.

This project will be implemented in three phases for a period of 26 months, including management of VTC and other four centers in three regions (north, middle and south).

A part of first phase has been completed (six months), such as creation and implementation of new governance, the model working and training in VTC, the four pilot centers, the formation of three committees (strategic planning, standards preparation, monitoring and evaluation) to follow working in VTC and report about the first draft for the reforming process.

Your Excellency Minister of Labour and the Sponsor of this Conference

I welcome you again and thank you for your support and your leadership for this conference and look forward to your respective guidance for those who attend this conference to give all of us the motivation for achieving its planned objectives and we pray from our heart that Allah protect our country which is following the great steps His Majesty King Abdullah II Ibn Al Hussein.

At the End

I hope that all participants achieve their desired goals during the conference and I wish you success to enjoy your stay in your second country, Jordan.

May God be with you for serving our country in light of His Majesty King Abdullah Bin Hussein, may Allah protect him.

Salam Alikom Wa Rahmat Allah Wa Barakatoh

II. Keynotes

The TVET sector is facing enormous challenges. At the same time the importance of e-learning in professional training and further education is constantly increasing. There are structural challenges and transformational processes associated with this.

Important questions in this context are:
– What role does e-learning play in connection with these structural implementation processes?
– Which role is attributed to e-learning in the working world regarding structural changes?
– What can be achieved with e-learning?

Dr. Klaus Bader-Labarre, senior project manager at InWEnt, Germany, focused in his keynote on the question: "**does e-learning still meet the needs of changing TVET systems?**"

"Education is the only business still debating the usefulness of technology"

(Rod Paige)

By quoting Rod Paige, former Secretary of Education/USA, Dr. Bader-Labarre pointed out the still ongoing discussions about the application of e-learning in the educational sector. During his presentation he spelt out the clear message that e-learning is a very relevant technology which can foster employment oriented and sustainable vocational education and training meeting the challenges this sector is facing in the region. He showed that in many Arab countries huge efforts are already being made to reform the vocational education and training sector precisely to address the demographic and labour market developments, underlining the immense employment possibilities in ICT related jobs.

He illustrated that a large and ever increasing number of young people entering the labour market is a major issue in most Arab societies and therefore job creation, especially for young people, is of paramount importance to those countries. This being the situation overcoming the widely perceived mismatch between graduate skills and the needs of the labour market, which are making school-to-work transitions often difficult, is a major challenge which the TVET sector is facing. At the same time, so Dr. Bader-Labarre, the use of computers and related information technology is a rapidly gaining ground in the overall society and at workplaces. In particular young people are at the forefront using ICT as a communication and learning tool.

Share of ICT–related occupations in the total economy, broad definition 1995 and 2007
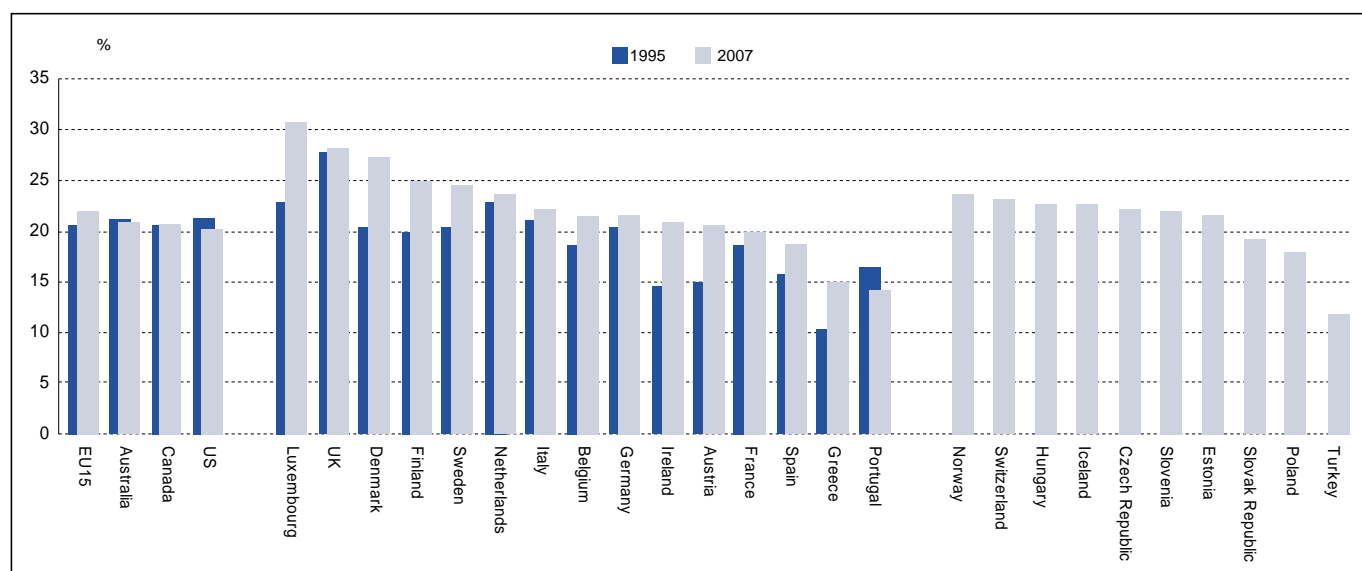
As a result the integration of e-learning into vocational education and training has to be seen as a strong potential to support the reforms of the TVET sector towards a labour market oriented and quality based system. Main entry points for such links are considered in teacher training, changes in methodology and didactics, private sector cooperation and marketing. Dr. Bader-Labarre mentioned with emphasis that also computer-based learning is a strong mechanism to reach and train target groups who usually have little access to qualification offers. All these fields are major topics of cooperation of InWEnt with its partner institutions in the region like the project to "Promote the development of Regional Standards in TVET" started in 2008. A key element of this project – amongst other components is to build regional capacity for e-learning and one important step in the region is the **establishment of a TVET Portal**. The aim, so Dr. Bader-Labarre, is to establish a lively community of practice in the fields of TVET and e-learning in Arab countries, applying new forms of information exchange and knowledge transfer for managers, directors of TVET institutions and for technical teachers and instructors.

Ali Nasrallah, director of the vocational training, employment and HRD department at the Jordanian Chamber of Commerce, introduced "**the challenges and trends in TVET**" from a labour market perspective showing that the enhanced focus on technical and vocational education arose from a number of sources e.g.:
– The rapid internationalisation of the world economy.
– The increased emphasis on competition and the development of global markets.
– The need for increased quality in goods and services if enterprises are to be competitive.
– The changing role of governments as they move away from providing services directly to concentrate on funding and control.
– The increased emphasis on "user pays" for governments provided services.

He outlined the guiding principles for TVET e.g. that the training must be industry focused through strong partnerships between training providers and the industries and enterprises they serve. He remarked that the training should be provided where it is needed, whether on the job or off-the-job. Further that the curriculum must be flexible enough and able to be delivered in a range of settings, modular, competency based etc. Finally, there should be a consistent system of certification which guarantees quality as well as transportability of skills. Mr. Nasrallah pointed out some **key competencies** as collecting, analysing and organising information or planning skills, use of mathematical ideas and techniques as well as the use of technology and self-learning, flexibility and adaptability are needed to cope with the new challenges.

Moderator Ms. Ulrike Damyanovic with a participant of the conference

Another point mentioned by Mr. Nasrallah is the **relationship between training providers and industries**. He is naming some principle guidelines for partnership as e.g. sharing more fairly the costs of training among the individual, enterprise, and the government or increasing industry ownership of the traineeship system with enhanced stakeholder input to major decisions. The sharing of the study plans' design, curricula, learning materials, training facilities, exchanging trainers and the provision of a more streamlined system of regulation of providers/credentials are stated as well.

Enhancing the quality of the training system through benchmarking and contributions for enhancing employability, on the job training, multi-skilling and flexibility are demanded as well as the implementing of vocational guidance, counseling services and encouragement of the training market.

With regard to the question of **quality and accreditation** Mr. Nasrallah was offering some possibilities e.g: Government provided facilities could be used (hired) by private providers. He emphasised that as soon as a training market develops, processes must be put in place either to accredit or to assure the quality of courses offered by private providers.

Ulrike Damyanovic, senior expert at European training foundation, offers in her keynote **"Harnessing new technologies for education"** a short overview about the **lessons learnt** and the **future options** of e-learning.

"The application of e-learning is supporting necessary changes and reforms in TVET systems"

(Dr. Klaus Bader-Labarre)

Ms. Damyanovic stated that the European Union supports the countries in the Middle East and North Africa in the reforms of their education and training system along the lines of agreements between national authorities and the European Commission. Further that the EU Barcelona Process/Union for the Mediterranean embraces education and training as vital for the development of knowledge societies and competitive economies. She illustrated that although there has been global progress in improving access to information and communication technologies, many countries in the region lag behind in making new technologies a commonplace in education. She showed that through close co-operation with education institutions in the region, the ETF has gathered valuable experience with current ICT learning activities and approaches in the Middle East and North Africa. Although projects like the MEDA ETE "e- learning course for teachers and trainers" (www.meda-ete.net) identified a number of opportunities, they also clearly demonstrated that the introduction of new technologies in education can pose considerable challenges.

Most initiatives are still to be seen at pilot level and have yet to reach the wider education system. They are currently offered of the shelf and do only partly reflect the realities of the targeted institutions.

She focused that further challenges are linked to the use of collaborative approaches in institutions which are more familiar with traditional didactical methods. This should be seen as compounded by the fact that online tools and technological concepts are still being pioneered in most of the countries.

She clearly spelt out that in the entire process of integrating e-learning solutions into education reforms, capacity building across the board is crucial as it helps to ensure ownership and commitment and should cover teachers, parents, directors, inspectors, ministry staff and the wider community. Experience suggests that future ICT-learning solutions also need to better address the overall learning environment including cultural characteristics and languages. Finally, Ms. Damyanovic made clear that the co-operation between public and private sector should be investigated benefiting from the input and intellectual capacity of the demand and supply side and allowing for tailor-made learning.

ETF and new technologies for education

– **Examples (1996 – 2009):**

– Phare Multi-Country Programme for Distance Education

– Survey on Technology Enhanced Learning in South Eastern Europe

– Regional MEDA ETE "eLearning for teachers and trainers"

– ELIG-ETF study on Public Private Partnership in eLearning

– EU education and training reform programmes

III. Panel Discussion

Developing qualified personnel in line with labour market requirements poses a significant challenge to educational providers. The following key questions were dynamically discussed during the panel discussion:
– How can e-learning contribute to this?
– Is e-learning a driver for private sector engagement?
– How can enterprises realise the potential e-learning represents?

The panel consisted of representatives from vocational institutions and organisations coming from various countries such as Jordan (Jordan Education Initiative, Queen Rania Center, Talal Abu-Ghazaleh Organization), Latvia (Latvian Information and Communication Association) and Germany (Federal Institute for Vocational Education).

The discussion's point of departure was that educational institutions are facing enormous challenges to train qualified personnel according to the labour market needs.

In this context following key questions have been predominant:
– What can be the contribution of e-learning?
– How can companies use the potential of e-learning?

Taken these questions as a basic all the panel speakers were interviewed which led into a lively exchange of experiences showing the different standpoints of the speakers.

E-learning was seen by all participants as a positive factor to support the qualification of manpower and as a "powerful tool". E-learning

Mr. Ali Sayed in the panel

was said to offer possibilities of exchanging learning materials and international standards which might bring enhancements of the vocational training on different levels. As an example "Digital natives" were mentioned, who could accept learning through new media. The discussion's focus was on the question how e-learning can be successfully implemented in companies according to the different conditions regarding the factors which have to be taken care of in this context.

Considerable constraints in implementing e-learning successfully, also paying attention to the acceptance of the learner, were seen in the following:
– The learning culture is not adapted to the new learning media (except at universities).
– The "return of investment" and the benefits of e-learning are not considered in companies. E-learning is still seen as too expensive.
– There can be a gap between teachers and learners as learners are often more experienced in using new media than their teachers.
– E-learning is still seen inferior to face-to-face training.
– There is often a lack of basic knowledge and education in handling new information- and communication media.

During the discussion following requirements were formulated in order to minimise constraints when implementing e-learning:
– It is necessary to have a clear implementation strategy; a clear concept and a process orientated action plan.
– Quality management and the possibility to obtain accredited certificates are needed.
– A subject-specific training focusing on the use- and application possibilities of new media has to be conducted in the target groups (teachers and learners).
– Cost-sharing between training providers and ministries is necessary in the beginning of the activities.

Finally three statements can be pointed out:
– When introducing e-learning measures one has to pay attention that there are several generations with different development backgrounds involved in this process. Therefore it is crucial to consider that the qualification with regard to the using abilities and the general IT knowledge are not homogenous. This is sometimes leading into situations in which the students possess more IT-capacities than their teachers, who have consequently at first to be introduced into the use of these new IT-instruments.

Participants of the conference

– Institutions like administrations and ministries are asked to economically support the implementation of e-learning activities as developing appropriate programmes and measures as well as allocating subsidies are central for success.
– It is recommended to follow a well organised and step by step process when introducing e- learning measures. Therefore a pilot project which is carefully evaluated after compiling the test phase could help to optimise the various processes connected to the introduction of e-learning.

At the end the debate gave a good overview into the various requirements which have to be taken care of when introducing e-learning activities. The auditorium contributed actively to the discussion offering further aspects regarding the implementation process of e-learning measures.

Coordination / implementation of certification
Controlling of the quality of content
Benefct concerning return of investment
How to achieve acceptance
How parents can be enabled to help their children
How to bridge the gab between teacher & student
Where is the right starting point

Questions & Clarification issues

The purchase of a mobile is more important than to buy a PC

Gap between the young and old generation

Benefit / value not visible directly

Learning culture is not ready for starting e-learning

"Digital Immigrants"

Sharing of costs of training among the individuals, anetrprises and governments

Findings to cover

Thematic Sessions

Positve Conclusions

Awareness of the importance of technical & vocational training

Sharing resources for a wide range of fields (eg. training material)

International work sharing, development of regional and internationa standards

Powerful tool

"Digital Nativs"

We are ready to start

TVET-Portal as communication platform transfering knowledge

Statemant & Recommendations

Action Plan for the Implementation is needed
biggest social challenge facing Jordan & Arab world is employment
Demographie: the young population is increasing; youth unemployment is high
Need for basic ICT & communication dkills – Consistent system of certification
Familarisation with collaborative learning and use of new technoöogy is a challenge
Well designed learning path and concrete outputs are key – Additional engagements are necessary
Move from pilot initiatives to wider role-out of activities
Social & personal contacts are important

IV. Plenary session

Presentation of the new TVET Portal for the MENA Region

The speakers of the plenary session focused on the need of up-to-date knowledge and information in TVET in a growing knowledge society and emphasised the important role of an internet-based portal that enables professionals in TVET to access relevant resources.

Martin Purpur, InWEnt, Germany stressed in his contribution the importance of a systematic upkeep in formal and informal education and training. Without a continuous "update" formerly acquired knowledge loses its value at an increasingly fast rate.

Technical and vocational education and training is particularly strongly affected because of several reasons:

In many parts of the world, individual countries are joining up to form larger economic units aimed at promoting regional cooperation.
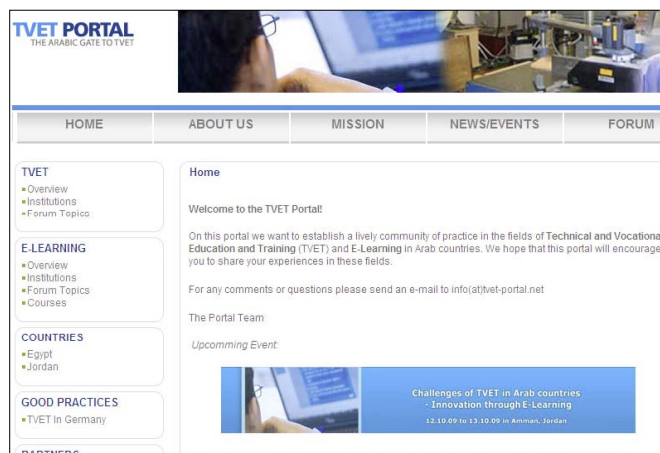
"In many parts of the world, however, skilled workers and management employees still have no access to knowledge resources which would enable them to continue their education and training on a self-learning basis. Resources such as specialist and updated information databases, dialogue platforms and learning portals are therefore urgently required."

(Martin Purpur)

The aim of the TVET Portal is to contribute to the exchange of knowledge and expertise among professionals in the field of TVET in Middle East countries. The portal has a special emphasis on the interface between TVET and e-learning and is an outcome of a training programme by InWEnt in Germany. During a one year stay in Germany 12 professionals from different public and private TVET institutions in Egypt and Jordan have been trained and qualified to gain the knowledge to build up the portal.

Only the cooperation of all the people and organisations involved enabled the TVET Portal to be established in its present form.
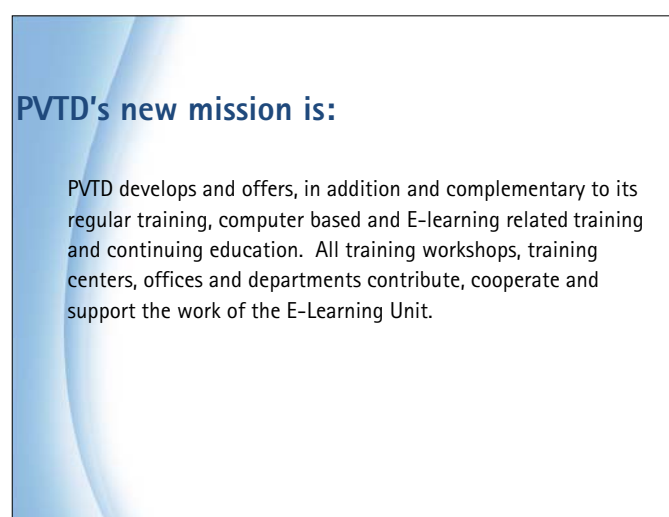

Mr. Uwe Wieckenberg with Mr. Ismaeel Hazouri
and Mr. Steffen Gegenheimer

Eng. Mohammed Tantawi, Chairman of the Productivity and Vocational Training Department (PVTD) of the Ministry of Trade and Industry in Egypt, marked the importance of the linkage between TVET and e-learning.

Especially for the PVTD as one of the major providers of technical training in Egypt it is extremely important to adopt and use the latest appropriate teaching and training methods and technologies. In this context e-learning is a far-reaching method to teach and train a growing number of trainees at a distance.

To include this new methodology, PVTD has changed its mission:

PVTD's new mission is:

PVTD develops and offers, in addition and complementary to its regular training, computer based and E-learning related training and continuing education. All training workshops, training centers, offices and departments contribute, cooperate and support the work of the E-Learning Unit.

For this purpose, an e-learning-unit was established with the objectives as follow:
– Coordination between the department and the TVET-Portal team
– Construction of an e-learning website
– Training of trainers in the usage of e-learning
– Offering external courses using e-learning technology

The e-learning unit consists of three sections:
– Hard- and software administration
– Authoring tools
– Content development

The PVTD as vocational training provider will benefit from the portal in many respects: technical, in marketing and culturally. The technical benefits are obvious because new professional services in the field of e-learning will be developed. More important are the cultural benefits in order of improving the reputation of TVET through a modern type of teaching and learning and the benefits in marketing, because PVTD products and services will be visible throughout Arab countries.

Finally, **Steffen Gegenheimer** and **Uwe Wieckenberg**, e-learning and IT consultants on behalf of InWEnt presented the **TVET Portal – The Arab Gate to TVET**.

In their presentation they gave an overview on the **objectives** of the TVET Portal, such as:
– establishing a lively community of practice in the fields of Technical and Vocational Education and Training (TVET) and e-learning in Arab countries
– applying new forms of information exchange and knowledge transfer (Web 2.0)
– supporting community members in solving their professional problems in daily work
– enhancing regional cooperation

The TVET Portal is divided into three sections for:
– Information
– Communication
– E-Learning

V. Sessions

The contributions of **SESSION A** "**New Approaches in Teacher Training**" moderated by **Ulrike Damyanovic** illustrated that e-learning opens new possibilities of internet-supported forms of learning independently of classic seminar schedules – also in the area of advanced training for teachers. Relevant questions like "what challenges are connected with this for the teacher "or "what changes are subjected to teacher qualifications" were lively discussed.

The first speaker **Prof. Dr. Abdelhafid Benmoussa**, Directeur Informatique, Institut Multihexa, Morocco, gave an overview about existing **approaches and good practices in teacher training** whereas Mr. **Yousef Arikat**, Al-Quds Open University, Palestinian Territories, provided participants with a set of insights into the **quality assurance and the quality management through e-learning**. **Sohail Naouri**, VTC, Training and Development Institute, Jordan presented the **achievements of the division for e-training**. This session closed with the contribution of Ms. **Warda Semmane**, Counselor, Ministère de la Formation et de l'Enseignement Professionnels, Algeria who spoke about **good practice approaches of policy**.

Moderator Mr. Egon Fleischer with Mr. Salim Baba-Ahmed

Moderator Ms. Damyanovic with Ms. Sabina Nari

The title of the **SESSION B**, moderated by **Munir Asad** "**Contribution and Role of Private Sector**" is giving reference to the key issues of this session. Questions like "what types of Public Private Partnership do exist, why do private enterprises employ IT media in further education or "are there successful business models" were actively debated.

The first contribution given by **Ali Sayed**, Counselor to the Ministry of Education for International Cooperation and Director of Mubarak-Kohl Initiative, Egypt and **Khaled Karara**, Deputy Head of Division Development Cooperation, German Embassy, Egypt, introduced the **cooperation model with the private sector in developing multimedia teaching material for the Mubarak Kohl Initiative**. **Victor Mihalic**, Chief Executive Officer for EBC*L International, Austria, presented **Best Practice: EBC*L – how to become competent in business management with e- and blended learning** to the interested audience. **Nevine El-Kadi**, Regional Manager Middle East & Africa, Cisco Networking Academy, Egypt, emphasised on the purpose and **advantages of private-public-partnerships in TVET** (CBTs, WBTs, Virtual Classroom, Online Seminars) whereas **Silvia LUBER**, Managing Director of Time2Learn, Germany, provided examples to increase the efficiency and **labour market relevance of TVET through e-learning**.

SESSION C entitled "**Methodological and Didactical Aspects of E-learning**" was moderated by Uwe Wieckenberg, Managing Director of Institut fuer Bildungstransfer e.V., Germany, who gave **together with Passant Sobhy**, Consultant for education projects, Egypt, an introduction about **elements of e-didactics** spelling out the clear message that e-learning is more than a scanned book as it is becoming an interactive teaching method through the use of didactic media tools. The following presentations were held by InWEnt Alumni members of the ICT Learning Management

Programme; **Mohamed Alkilany**, PVTD/STI Cairo, Egypt, **Murad Rawashdeh**, VTC Amman, Jordan, Georges Melki, IPNET Beirut, Lebanon and **Aziza Mahmoud**, MKI Alexandria, Egypt explained in creative animations the four **main forms of e-learning** (Web Based Training, Computer Based Training, Virtual Classroom and Online Seminar).

Under the aspect of **"Free and Open Source E-learning Application Programmes for Interaction and Collaboration"** SESSION D was introduced. Connected to the fact that the application of e-learning is more and more supported by freely available and cost-effective products, which is an important premise for a broad application of e-learning, questions about which tools – open source or otherwise – can be used as a supplement in e-learning were targeted in this session. **Dr. Frank Renken**, Project Coordinator GTZ, Germany, pictured the creation of a multilingual **online-based technical dictionary** as a useful tool to improve the linguistic basis for international dialogue in selected industries. The next presentation, given by **Prof. Dr. Malte Beinhauer**, HTW Saarland, Germany, gave a differentiated overview about the organisational issues and impacts of **Web 2.0**. The session, moderated by **Susanne Kollmeier**, closed with **Ismaeel Hazouri**, Project Manager Smartway Inc., Saudi Arabia, who explored **the usability of Moodle learning management system for TVET**.

In **SESSION E** key issues of **"Enhancing Regional and International Cooperation through Learning Communities/Communities of Practice"** were analysed.

Taken for granted that e-learning communities are becoming increasingly more important, learners will tend to learn with each other and online learning communities as a tool of furthering their professional education will be used more often. In the following contributions the question of which usage scenarios have proven themselves successful and advantages and disadvantages are discussed. In the first contribution the **TVET Portal** was presented by **Uwe Wieckenberg**, Managing Director of Institut fuer Bildungstransfer e.V., Germany, as a community of practice for the region. **Max Ehlers**, IT specialist for UNESCO-UNEVOC, Germany, introduced **TVETipedia** as an open portal on technical and vocational education for the global TVET community. **Aref Radhoueni**, Centre National de Formation des Formateurs et de l'Ingénierie de Formation and **Lotfi Messaoudi**, Union Tunisienne de Solidarité Sociale (UTSS), Tunisia demonstrated the **Telecentre's** cooperation with local target groups for tailor-made e-learning offers. The moderator Mr. **Munir Asad** gave the word in a final presentation to **Dr. Amr Ibrahim**, American University Cairo (AUC), Egypt, who spoke about the **learning and IT policy in the Middle East**.

SESSION F was giving the possibility to discuss about **"Marketing of TVET Services and Products"**. E-learning contributes to the image improvement of education providers and the marketing of such training is necessary. Therefore targeted marketing is fundamental and adaptations within the framework of marketing management are necessary. Important questions were "what activities can be used to reach the external market?" and "what form should the products take?"

Salim Baba-Ahmed, Ministère de la Formation et de l'Enseignement Professionnels, Algeria, pleaded for the **Telecentres** in Algeria and Tunisia as service providers via their web portal. **The CRYSTAL online library for TVET**, as another example of Marketing TVET services, was illustrated by **Matthias Giersche**, Adviser Knowledge Management, GTZ, Germany. **Edgar Wang**, Consultant for educational projects and member of the Scientific Council of LEARNTEC, Germany pointed out clearly that localisation makes a difference and referred about **good marketing of online-based TVET products**. Finally the moderator **Egon Fleischer** gave the word to **Lutz Michel**, Managing Director of MMB-Institute for Media and Competence Research, Germany, who showed some methods of **evaluation and monitoring within the e-leaning sector**.

Moderator Ms. Susanne Kollmeier with Mr. Michael Haertel

V.1 Session A

Existing Approaches and Good Practices

By Prof. Dr. Abdelhafid Benmoussa

After an introduction into the general structure of the private professional education system of Algeria regarding the qualification accreditation as well as the problems to be solved within this field, the expected targets and results of e-learning were presented.

E-learning targets of EFPP
– Implementation of a new way of training
– More clients from different professional background and satisfaction for a maximum of clients
– Homogenisation and personalisation of the training
– Reduction of time and distance related constraints for the participants
– Reduction of the costs regarding the training of the participants as well as their moving to the centers
– Development of the further education programmes nationwide

Challenges which have to be overcome:
– Coping with the increasing number of participants (students or employees) searching for a qualified education
– Reduction of time and distance related constraints for the participants
– Cost effective management of the training offers (some specialisation modules do not require a permanent formation in every site of the group of the EFPP)
– Commitment of the permanent trainers (certification, support)

Expected outcomes of e-learning:
– Good sensitisation of the society (participants, parents, professional environment…) about e-learning
– Development of further distance education programmes
– Qualified training for labour market relevant professions
– Reduction of expenses (training and offers)
– Beneficiation of international expertise at low costs

Projects:
– Projet MedNet'U
– Académie CISCO
– Projet AFPA
– Projet MEDA-ETE (shown in the PP-slide below)
– Projets institutionnels (EFPP)

e-Learning – Initiatives et réalisations du DFP (ETF) 1/2
Développement d'un dispositif de formation de formateurs en ligne

• Projet MEDA–ETF
– **Objectif du projet:** atteindre une connaissance complète et approfondie des aspects méthodologiques, pédagogiques et techniques de l'e-Learning.
– **Finalité:** mettre en œuvre des cours e-Learning adaptés aux besoins de notre pays et de nos institutions de formation.
– **Acteurs du projet:** 14 formateurs TIC pilotes provenant de 6 EFPP + DFP + Experts ETF & Giunti Labs.
– **Vue d'ensemble du programme de formation des formateurs:** composé de 10 modules regroupés en 3 sections:
• **Section 1:** Introduction aux notions de base du e-Learning.
• **Section 2:** Conception et développement d'un cours e-Learning.
• **Section 3:** Mise en œuvre et gestion de l'e-Learning.

D.F.P. — Dr Abdelhafid BENMOUSSA, Président du Groupe MultiHexa Maroc Coordinateur technique national du projet e-Learning (ETF) — MEDA-ETE regional project

E-learning – actual situation and needs

Actual situation:
– Presence of qualified trainers, but there is a need for perfectionism
– Some platforms have already been introduced : Moodle, Dokeos, Ganesha
– Population is not sufficiently informed about e-learning
– E-learning is not nationwide accessible
– The institutionalisation of e-learning systems is missing

The needs:
– Financial incitation of the ministry in charge
– National communication and sensitisation
– Creation of a content development center
– Development of the further education and its certification

e-Learning – Prochaines étapes et pistes de réflexion

• **Prochaines étapes – comité mixte (DFP – EFPP) chargé:**
– d'élaborer un cahier de charges du dispositif e-Learning.
– de préparer un plan d'action, établir un calendrier et définir les responsabilités.
– de mener une campagne de communication et de sensibilisation à l'échelle nationale.

• **Quelques pistes de réflexion:**
– Institutionnalisation du système e-learning et accréditation des **diplômes en ligne** (textes juridiques).
– Concrétisation de la dimension régionale e-Learning: élaboration d'un cahier de charges régional.
– Mise en place d'une plate-forme de travail régionale.
– Mise en place d'un référentiel de compétences e-formateur régional.
– Poursuite de la collaboration avec ETF.

D.F.P. — Dr Abdelhafid BENMOUSSA, Président du Groupe MultiHexa Maroc Coordinateur technique national du projet e-Learning (ETF) — MEDA-ETE regional project

Quality Assurance and Quality Management through E-Learning

By Yousef Arikat

Quality assurance through e-learning will certainly make the shift to the information society more successful, but e-learning creates new variables, constraints, and issues, making it fundamentally different from face-to-face learning environments. Therefore e-learning in particular, with its ability to render time and place irrelevant, requires that we abandon traditional measures of quality.

C. Quality Assurance environment

– QA is a core value.
– It's perceived as a dynamic, iterative and ongoing process
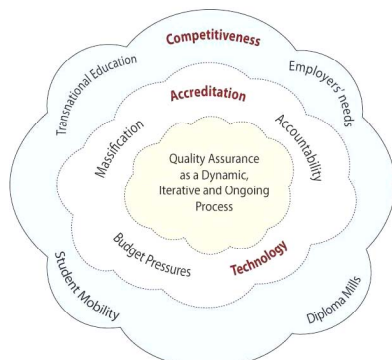– QA can be embedded into daily practices

Fig.1 Situational factors affecting QA
(Abdous et al, 2008) 3

Figure 2: QUALC

Figure 2 shows the life cycle of QA model from planning to post-production and delivery.

"Quality assurance requires not only the performance of specific tasks but also an approach to this performance that is consistent with ethical understanding, professionalism and the need for personal development."

(Yousef Arikat)

Quality becomes more and more the crucial factor for success in learning, education and training (LET). We need quality standards to ensure the academic integrity of e-learning programs. Evaluating and assuring quality in e-learning programs has become a critical issue. But new approaches in teacher training with view on quality assurance and quality management through e-learning require an agreement on a set of universal attributes or standards of a quality educational experience and a focus on the learner rather than on the institution to make sure that various quality outcomes were met during the development.
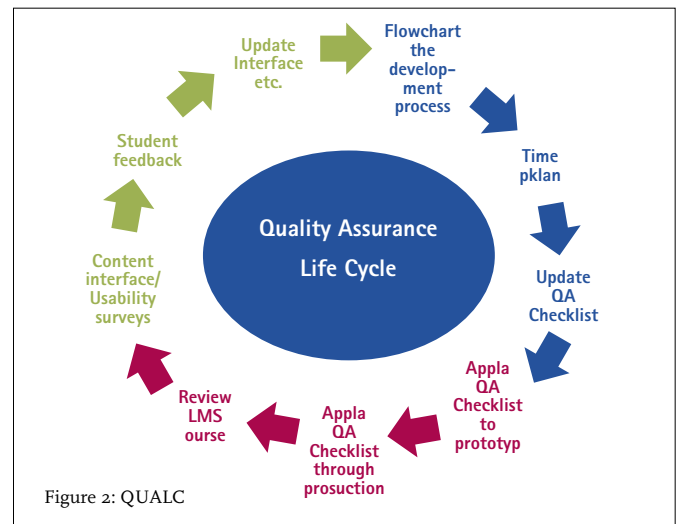
Common barriers as e.g. the inequality of access by students to the technology itself or the challenge of confronting academic staff to adopt new approaches to teaching with technologies they may be unfamiliar with have to be overcome. And the fear many academics have namely that their formerly integrated role of course developer, teacher and assessor will be distributed across a team of specialists has to be solved.

Hence quality assurance approaches are only as good as the systems put in place to support and monitor their implementation and the willingness of those tasked with improvement processes to engage with both the framework and the systems put in place.

Challenges of TVET in Arab Countries – Innovation through E-Learning

Presentation about the Achievements of the Division for E-Training

By Suhail Naouri

Regarding the vocational training corporation directions to employ the modern technology in the training process, the vocational training corporation established a specialized division for e-training. The division of e-training assumed the task of forming the e-training teams at the level of the vocational training sectors following up the training process for the e-enrichments production. The division of the e-training created a portal for the vocational training corporation, which was launched in June 2008 in order to open a way for all trainees and trainers in the vocational training corporation to interact with the theoretical and practical learning materials through browsing and downloading those materials.

The functions and duties of the e-training division are:
– Forming e-training teams at the level of professional sector
– Identify the training needs of the e-training teams
– Writing the scenario for the practical exercises and theoretical learning materials
– Development of the learning content for electronic publication
– Chart forms and graphics necessary for practical exercises and theoretical materials
– Development of the e-enrichments
– Distribution of the e-enrichments via CDs to the vocational training centre
– Establishing the web-site of e-training division

Challenges:
– The infra-structure is not completely available
– The salaries of the employees are low. As a result the emigration of well-qualified specialists in the field of (ICT) is increasing
– The lack of well-trained and qualified manpower in the field of e-learning
– Scarcity of the required financial resources to support the maximisation of the e-learning field

Solutions:
The following procedures will be taken to avoid the above mentioned challenges:
– Increasing the speed of net connections to offer the required equipment
– Building a strong infra-structure
– Seeking for motivations to increase the salaries of the e-learning team members
– In the area of manpower: training programmes are needed to obtain achievement
The following schedule is foreseen to support this:
– Delivering all credited training programmers in the vocational training corporation by the e-learning type
– Upgrading the skills of the human resources in the field of e-learning
– Maximizing the usage of e-learning at the national and regional level

Achievements of the portal:
Currently the division of e-training is working on reforming the learning materials and adapting them to be suitable for electronic publishing.

The address of the portal on the World Wide Web is:
www.e-training-vtc.gov.jo

Vocational Training Corporation / The Technical Department		The Division of e-Training

The achievements of the tourism & ict team and automotive driving & maintenance(*) team during 2007

Field of activities	Objectives	achievements
	Conducting a story board training course	100 %
	Conducting a macromedia flash training course	100 %
	Conducting Interactive testing training course	100 %
	Conducting face-2-face meeting in cooperation with (etf)	100 %
	Hosting the lunch up meeting for the team of Palestine	100 %
	Conducting the second face-2-face meeting in cooperation with (etf)	100 %
	Conducting a training course in the usage of the internet (*)	100 %
	Conducting AutoCAD training course (*)	100 %
	Conducting a story board training course (*)	100 %
	Conducting a macromedia flash training course (*)	100 %

V.2 Session B

Cooperation Model with the Private Sector in Developing Multimedia Teaching for the Mubarak–Kohl–Initiative (MKI)

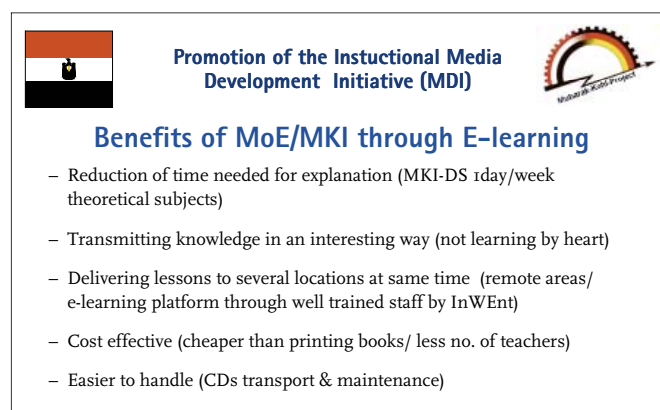**By Ali Sayed and Khaled Karara**

Public Private Partnership (PPP) also known as development partnerships with the private sector has been an instrument introduced by the German Federal Ministry of Economic Cooperation and Development (BMZ) in 1999. It is an effort to combine goals of development cooperation with that of the private sector businesses.

Promotion of the Instuctional Media Development Initiative (MDI)

Cooperation for Synergies

This means that there are many potential fields for cooperation between the two sides!

Goals of Development Cooperation — **PPP** — Goals of Private Sector Businesses

The answer → **1999: German Government creates PPP to make use of this trend for development policies**
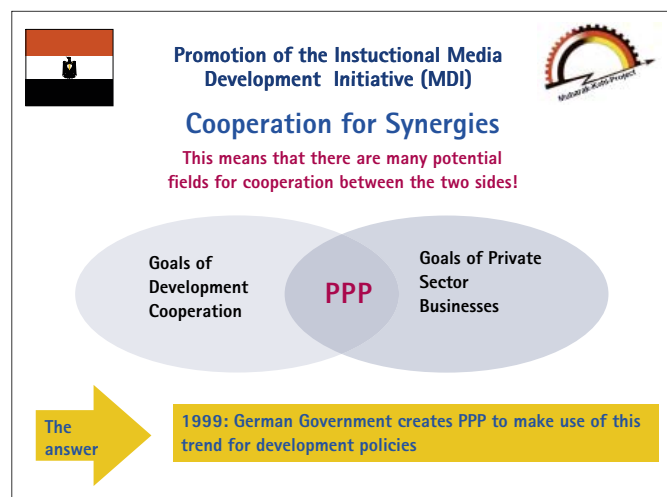
PPP stood at the core of the Promotion of Instructional Media Development Initiative (PIMDI) by the German Technical Cooperation (GTZ) in developing in cooperation with the private sector, modern e- learning and teaching material for vocational training and education in Egypt.

Promotion of the Instuctional Media Development Initiative (MDI)

Role of the Public Sector Partners

MoE
– Making available existing MKI edu. Material
– Forming specialized committees (revising & endorsing)
– Getting approval for testing phase
– Providing suitable teachers & inspectors for training
– Undertaking necessary financial measures for application and dissemination
– Following-up and evaluation of pilot phase and its impact

MoE
– Setting up PPP fund, to finance technology transfer
– Coordinating timely Egyptian contribution
– Assisting in matchmaking (German & Egyptian companies)
– Assuring acceptance of developed Media
– Organizing a visit for TDC/MoE at Companies HQ
– Assist in dissemination (trade fairs, visits to VTCs)

Stemming from the belief that e-learning, or the use of electronic means in disseminating knowledge for vocational education and training has become an important aspect, the idea of implementing PIMDI came to light, as a direct result of the experiences of the Mubarak-Kohl-Initiative (MKI), an Egyptian-German initiative introducing cooperative (dual) training system.

Promotion of the Instuctional Media Development Initiative (MDI)

Benefits of MoE/MKI through E–learning

– Reduction of time needed for explanation (MKI-DS 1day/week theoretical subjects)
– Transmitting knowledge in an interesting way (not learning by heart)
– Delivering lessons to several locations at same time (remote areas/ e-learning platform through well trained staff by InWEnt)
– Cost effective (cheaper than printing books/ less no. of teachers)
– Easier to handle (CDs transport & maintenance)

In its strive for a modern Technical and Vocational Education and Training (NTVET) system, it was agreed with the Ministry of Education (MoE) represented through the Programme Policy and Implementation Unit (PPIU) to establish a pilot model for the development of modern electronic instructional media in cooperation with German and Egyptian companies for the students of the Mubarak-Kohl-Initiative as a first step and technical secondary students in Egypt and the Arab region as a second and third step.

Best Practice: EBC*L (European Business Competence* Licence)
How to Become Competent in Business Management with E- and Blended Learning

By Victor Mihalic

Which training concept shows the best result when it comes to preparing for the challenging EBC*L Exam (European Business Competence* License). The clear answer is: E- and Blended Learning. More than 30.000 people from 30 countries have passed the internationally standardised EBC*L Exam. Dozens of different training concepts have been developed in order to prepare for this exam. It could be proved that the 'Easy Business' training concept, which is based on e-learning and blended learning, shows the best results.

Even though the training and learning time is reduced to 30-50% of traditional face-to-face trainings, the candidates have excellent passing rates at their exams. Moreover candidates who prepared with Easy Business give excellent feed back in terms of learning motivation and learning pleasure.

Based on these experiences it can be stated that the EBC*L certificate as a motivating factor and e-learning as the 'easy way to learn' are an excellent opportunity to spread one of the most important key competences in a global economy. Therefore the system is generously funded by the European Union and is currently implemented by the German 'Agency for Employment'.

Cisco Networking Academy – Benefits of Public Private Partnerships

By Nevine El Kadi

Comprehensive learning program, Cisco Networking Academy is a global education program that teaches students how to design, build, troubleshoot, and secure computer networks for increased access to career and economic opportunities in communities around the world. Networking Academy provides online courses, interactive tools, and hands-on learning activities to help individuals prepare for ICT and networking careers in virtually every type of industry.

Corporate social responsibility, as Cisco's largest corporate social responsibility program, networking academy aims to improve socioeconomic conditions in communities around the world by increasing access to education and career opportunities, supporting the development of an educated ICT workforce, and promoting the growth of the ICT industry.

Global partnerships: Networking Academy aims to provide a consistently enriching learning experience by partnering with public and private institutions such as schools, universities, vocational colleges, businesses, nonprofit-, and government organisations to develop and deliver innovative ICT courses, improve the effectiveness and accessibility of the program, increase access to education and career opportunities, and help ensure that students and instructors have the resources they need to accomplish their goals.


Delivery method: Networking Academy courses are delivered in multiple languages through an online learning system. Courses are supported by classroom instruction, hands-on learning activities, and online assessments that provide personalized feedback. Networking Academy instructors receive extensive training and support to help ensure a consistently-enriching learning experience for students around the world.

The Academy program
– provides students with the internet technology skills essential in a global economy
– prepares students for the demands of the workplace
– leads to further education and learning
– preparation for industry standard certifications.

Cisco Networking Academy is a comprehensive approach to education based on 4 key elements:
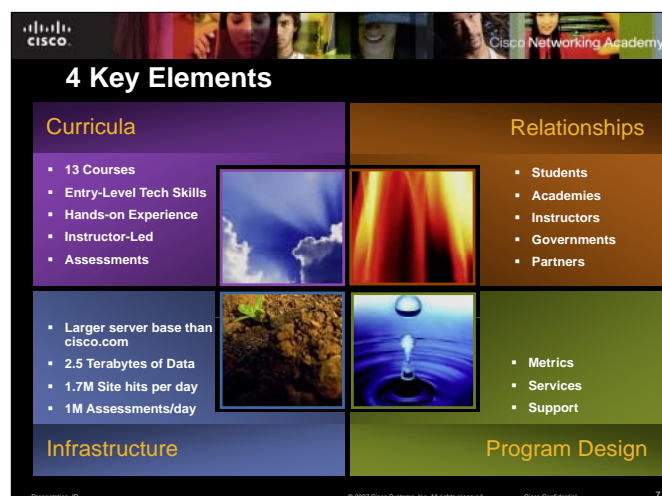

– Our curricula include 13 courses providing entry-level technical skills to pursue a career path in IT
– Our infrastructure is robust – now residing back inside Cisco
– Our relationship with our academies, instructors, governments and partners are vital to success and supported through an eco-system approach to partnership
– Our program design and support is highly metrics-driven to ensure the best understanding of how well we are doing in all areas important to Networking Academy success

This organisation makes us well-poised to flexibly meet market shifts and demands and to better serve our customers.

Increasing the Efficiency and Labour Market Relevance of TVET through E-Learning – An Innovative Train-the-Trainer Conception – A Proven Benefit for all

By Silvia Luber

For a growing number of public institutions, organisations as well as companies in the various sectors of industry virtual collaboration and learning have become increasingly important to improve and to make progress with performance and innovation.
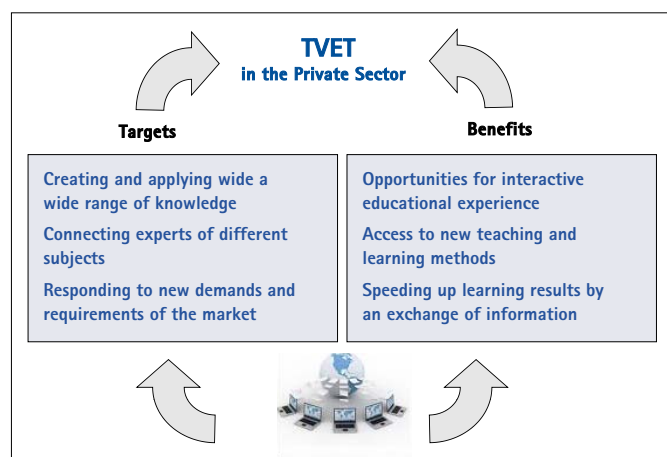
This also applies to the example of an innovative train-the-trainer conception to cope with rapidly changing technologies and the demands of life-long learning.

This train-the-trainer conception has been developed and carried out by the vocational training academy of a company in the private sector. But it is also open to be applied to the needs of trainers in other sectors of economy. The training is performed in a blended learning mode and its virtual part is based on the use of a virtual classroom.

Its benefits are:
– The training is performed in a fairly short time of four sessions à 1.5 hours meaning a high time effectiveness and thus an economic benefit for the company.
– The trainers enhance their employability by transferring their performance from a classical classroom situation to a virtual environment while ensuring a high quality standard.
– The trainers work actively and self organised guided by a tutor, afterwards they can act as mentors for other colleagues.

Benefits for:

The Company
– reduced time for the sales training from 5 to 3 weeks
– travel costs reduced
– less money for the production of training material and its distribution
– Image increased in favour of the application of specialists and young professionals

The Trainers
– increase their employability tremendously by the acquirement of online skill and competence
– high relevance for the labour market
– develop new teaching and training strategies along with personal satisfaction and motivation

V.3 Session C

Elements of E-Didactics

By Uwe Wieckenberg and Passant Sobhy

E-learning is a new field for teachers, instructors and trainers. Actually we should use the term "E-Teaching" instead of "E-Learning" because we rather are changing the process of teaching, using information and communication technologies as well as electronic media and the internet. But – apart from this fact – teachers, instructors and trainers seem to forget basic features of their profession: they seem to forget about pedagogy and especially didactics. Very often the impression occurs that pedagogy and didactics are not important in e-learning because the content seems to be self-explanatory. But after 20 years of experience with different e-learning applications like Computer Based Training or Web Based Training Programmes and Online Seminars we come back to the point that pedagogy and didactics are very important for teaching and learning independent of the teaching means.

This contribution emphasises the importance of classical pedagogical approaches and their adaptation to new electronic teaching methods.

At first we should be aware of the basic questions every teacher and instructor should be aware of:
WHO should learn WHAT with WHOM, WHERE, HOW and WHAT FOR?
In other words: the main issues of pedagogy are:
– the analysis of the target group (who)
– the teaching/learning content (what)
– the competence of the teacher/instructor (with whom)
– the location and the available teaching aids (where)
– the teaching methodology (how)
– the desired goals and objectives (what for).

2. Main Issues of Didactics
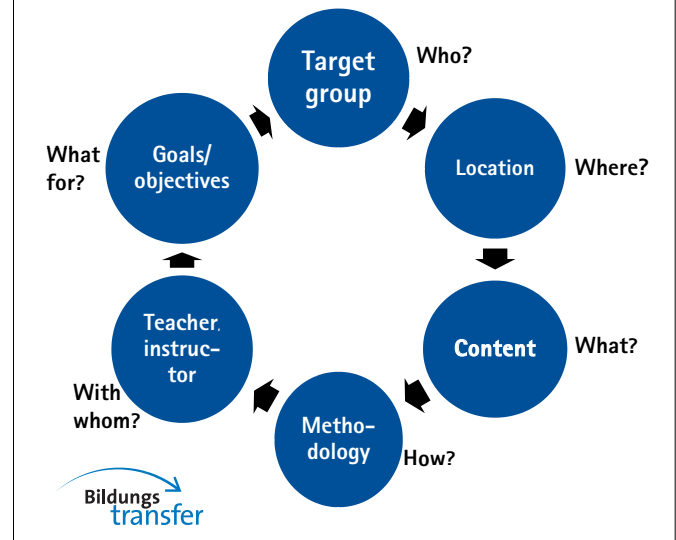
Depending on the specific composition of these six components we have to choose the appropriate teaching strategy.

There are 4 basic concepts of teaching strategies:
a) **Face-to-face** training
b) E-learning components as **Add-On** of face-to-face training
c) **Blended Learning**
d) Fully **Virtual Training**

Analysing the composition of the main didactic issues and the available basic concepts, we can choose the appropriate strategy for the specific learning objectives and the specific target group. In many cases we come to the conclusion that we have to mix classical (face-to-face) situations with e-learning, which comes to "blended learning". This is one aspect. Another aspect refers to the fact that we most probably need to implement a new learning culture because we need a new and different behaviour in teaching and learning to benefit from e-learning.

Computer Based Training

By Mohammed Alkilany

Characteristics of CBT
– Depends entirely on the adoption of the trainee (article loading and operation)
– Be prepared in the media (CD, DVD)
– Does not require the presence of a teacher or the educational process
– Sometimes approaching the form of conventional books
– Often contains multimedia such as audio
– Often limited by the interaction of some systems of examinations and assessment
– Often contains some additions, such as assistance and to answer some questions.

Advantages of CBT
– Can be submitted at any time and any place without relying on prior agendas
– Be submitted on request of the trainee and personal qualities
– The need to reduce dependence on the presence of the teacher
– Does not require a strong infrastructure such as some others
– Encourage individual learning
– Good documenting of training materials

Disadvantages of CBT
– Requires the availability of computers
– Often requires licenses for the operations which should be provided to the user
– Learning environments are less interested in interactive and social aspects of education, sometimes the lack of accurate results at the level of all trainees
– Needs more time for development, publishing and distribution
– High costs for modernisation

Web Based Training

By Murad Rawashdeh

WBT is the abbreviation for Web Based Training.

WBT is a form of e-learning in which the training material resides on web server accessible through the World Wide Web or intranet using internet browsers application like MSIE or Firefox.

Typical media elements used are text and graphics. Other media such as animation, audio, and video can be used but require more bandwidth and in some cases additional software like animation player, audio and video player. Some of WBT contain interactive methods such as chat, instant messaging, videoconferencing and forums.

We can say that WBT is an innovative approach to distance learning in which computer-based training (CBT) is transformed by the technologies and methodologies of the World Wide Web.

Web-based training is an ideal vehicle for delivering training to individuals anywhere in the world at any time.

Advances in computer network technology and improvements in bandwidth will lead in capabilities for unlimited multimedia access. Web browsers that support animation, chat- and real-time audio and video will offer better training opportunities. With the tools at hand today, we can offer highly effective WBT to meet the training needs. Web-based Training helps today's busy workers to perform their jobs and update their knowledge.

To apply the WBT method we need:
- As infrastructure – Hardware and Software:
  Computers connect to local area network (LAN) and this LAN connect to internet for access the WBT site or local server as intranet, where the WBT content is saved, web browser application and special multimedia application.
- As trainees:
  Good knowledge of basic computer skills or being familiar with computer usage.

Advantages of WBT:
- easy delivery of training to users
- opportunities for group training (asynchronous and synchronous) as well as individual training
- multi-platform capabilities (Windows, Mac, UNIX, PDA, phone, other wireless devices)
- easy updating of content
- requires less technical support
- access is controllable
- options for installations on private networks for security or greater bandwidth
- options to link with other training systems

Disadvantages of WBT:
- bandwidth/browser limitations may restrict instructional methodologies
- limited bandwidth means slower performance for sound, video and intense graphics
- someone must provide server access and control usage

Virtual Classroom

By Georges Melki

How could a virtual classroom be described?
This form of e-learning is offering participants an interactive form of lecturing and communication. Participants of a virtual classroom are able to see each other during the lecture and give acoustic contribution, while being at different locations. This is possible due to internet access, which gives us the chance to hold virtual lessons where participants can interact, pose questions and get answers from the tutors etc. It is a lively way of holding lessons independent from a specific location.

We need:
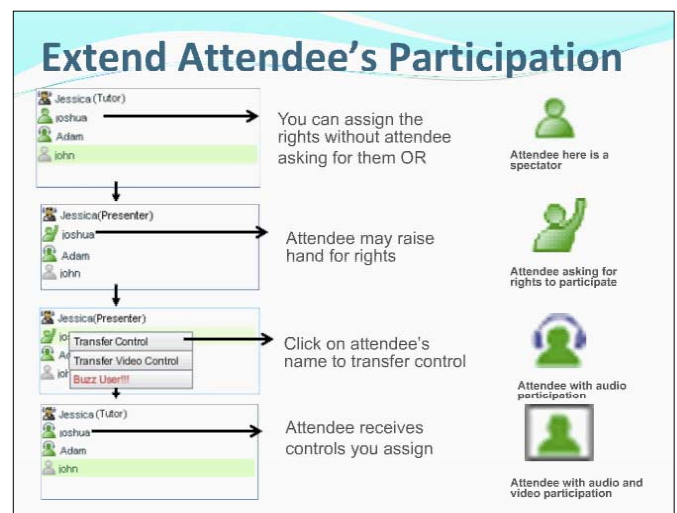- Audio and video two way communication
- Instant text messaging through Chat
- White board with drawing and writing
- Privileges to control each student's participation independent
- Session archiving

Online Seminar

By Aziza Mahmoud

Online Seminar is a set of educational philosophies and systems, concerned with providing learners with increased choice, convenience, and personalisation to suit them.

Types of Online Seminar
– Synchronous
– Asynchronous
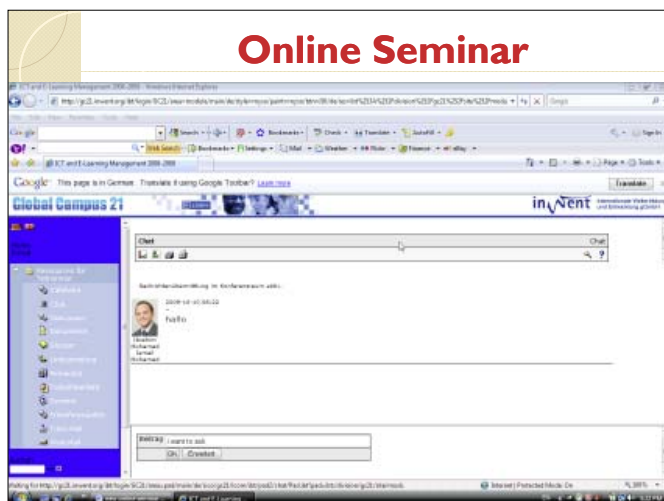
Online Seminar

In particular, online seminar provides learners with choices about where, when, and how learning occurs.

The advantages are:

The advantages of the Online Seminar are:

- Dynamic Process
- Learner Controlled
- Informal Learning
- Platform Independent
- Knowledge Management
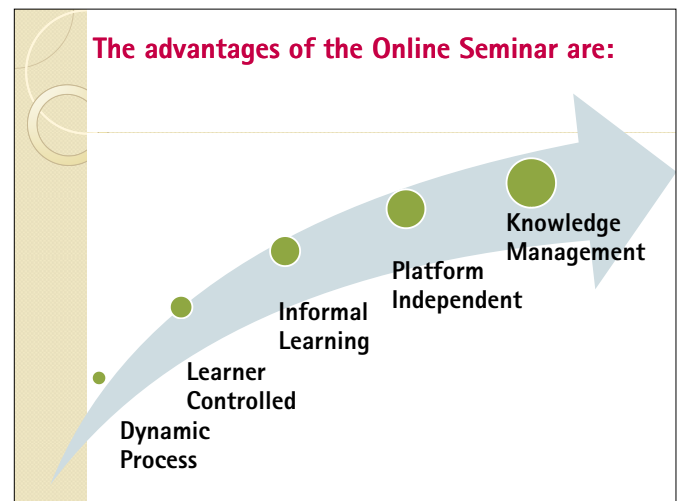
By taking care about qualified personal, maintaining and by keeping finances in sight, online seminars are a very advantageous form of e-learning.

V.4 Session D

A Technical Dictionary for the Arab World

By Dr. Frank Renken

*"The Arab Human Development Report calls for intro-
ducing modern information technologies and the Arabi-
sation of imported knowledge. This enables young minds
to develop firm critical and creative capacity in their own
language and to assimilate the rising volume of scientific
knowledge."*

(Dr. Frank Renken)

Drawing on these demands, the project for creating a multilin-
gual online-based technical dictionary was initiated. It was com-
missioned by the German Federal Ministry for Economic Co-
operation and Development (BMZ) and is implemented by the
GTZ together with Arab partners, in cooperation with the Goethe
Institute in Cairo.

Appearing in twenty volumes, the dictionary will provide the basis
for the standard translation of textbooks, curricula and technical
handbooks. It will offer young Arabs in training or studying at a
university, from Morocco to the Arab Gulf, a quick reference aid
for the many language problems that arise.

The first two volumes on automotive engineering and the water
sector, respectively, are to be completed by 2010 and will be made
available on the internet.

By 2015 the technical dictionary will successively be expanded by
eighteen additional volumes, covering a wide range of fields such
as energy and environment, transport, construction, information
technology, finance and law.

Web 2.0

Organizational Issues and Impacts or the Dark Side of the Story

By Prof. Dr. Malte Beinhauer

Web 2.0 is named as the new panaceas for e-learning. The power of swarm intelligence, the transformation of tacit (implicit) knowledge to explicit knowledge as well as the use of internal as well as external networks is greeted with enthusiasm by HR-managers as well as lecturers.

On the one hand, web 2.0 technologies are able to put learners – and not the teachers – at the center of learning, but on the other hand educators and planners are afraid of losing control of the information provided to the learners as well as losing control of actions during the learning process by the learners.

For these reason control mechanisms are very likely going to be installed and causes the web 2.0 motor to be throttled back. Is this really a threatening scenario?

For educators in the field of e-learning this should not be threatening. We can compare the usage of web 2.0 technologies with the iceberg model: we notice only 15% of the knowledge and experience that is to be shared through web 2.0 and we shouldn't be afraid of the other 85%.
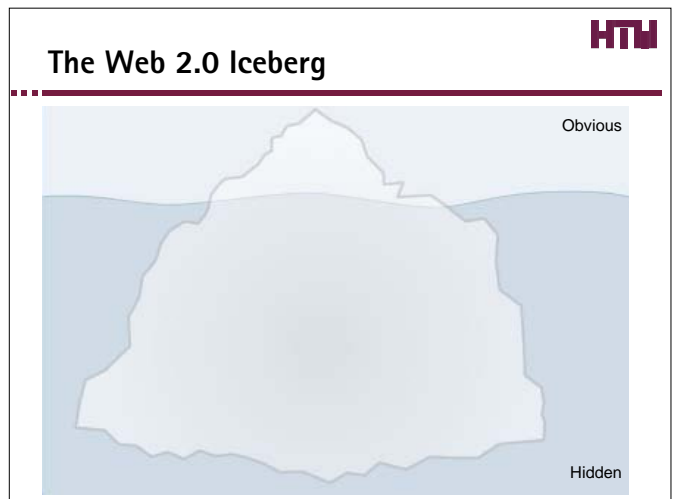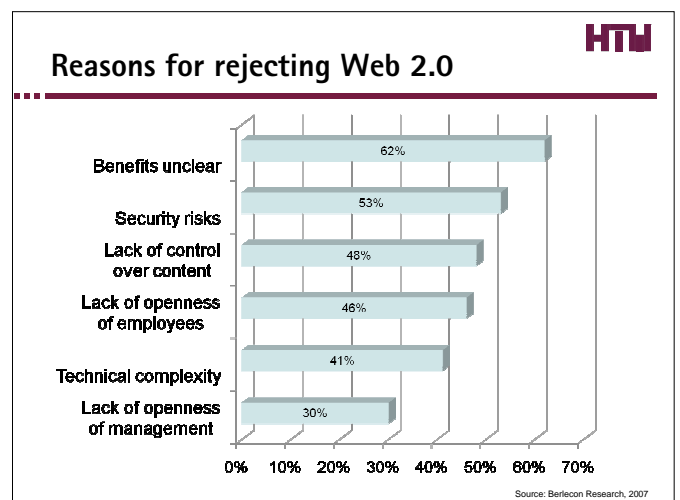

The web 2.0 iceberg

So, we should
– Offer access to information
– Breed innovations by using innovative Web 2.0 tools
– Integrate external knowledge from partners, customers or individuals
– Build up networks
– Communicate throughout the firm/class

Of course there are reasons to reject Web 2.0 technology:

As a conclusion we can state that e-learning 2.0 is not a self-fulfilling process and there are some organisational issues that will occur during the transformation process towards learning 2.0, but it will be manageable if all organisational impacts are considered and accepted.

Still Web 2.0 training is possible...
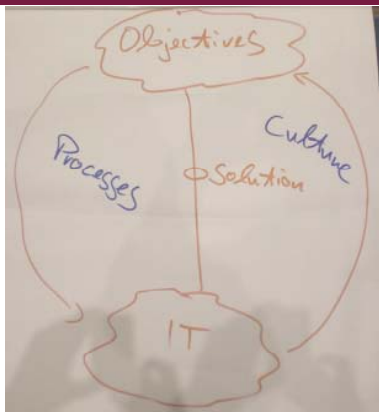
Participants of the conference

Utilizing Moodle Learning Management System for TVET

By Ismaeel Hazouri

The presenter elaborated during his presentation the following:

– Definition of Moodle system
– Different users of Moodle in Arab region (Ministries, Universities, Military Sectors, NGO's, Medical Services, TVET etc...).
– Moodle Services: Educational services (tests, surveys...), publishing resources and communication and interaction (chatting, wiki, blogs...).
– Moodle compatibility: Moodle is compatible with different software and programs such as Joomla, Second Life, IMS, Google etc...).
– Reasons of using Moodle worldwide: Combination between LMS and e-learning under different standards, Moodle is developed by many experts around the world, working with different operating systems, supported to many languages etc.
– Showing different tools and options in Moodle: Synchronies learning and virtual class room, Self training, Sloodle is an Open Source project which integrates the multi-user virtual environment of Second Life® with the Moodle® learning-management system.
– Moodle Challenges and some suggestions to deal with these challenges in Arab region: Some Moodle users are using Hijri Calendar(Moodle is working also with Higri Calender), lacking of using computer or internet (Moodle is easy to be used), few knowledge of English language or other foreigner

languages which are supporting Moodle (Moodle is supporting Arabic language), less of qualified TVET trainers (Conditional activities and self training can improve this issue), TVET is depending on practical skills more than cognitive skills (Connect Moodle virtual training environment that are most suitable for training and equipment testing process and through a system Sloodle), difficulties of face to face training and communication with trainers (Moodle system supports virtual classrooms and conferences through Video smart meeting, Dimdim), embarrassment in some target groups for learning and training in TVET (Moodle is a system of distance learning using the Internet and the trainees may learn from out their houses and without mixing with others directly), difficulties and special requirements (Moodle can be customized according to work needs).

– Recommendations: The cooperation and symmetrical process to make individual and collective efforts and provide it to society is one of the main reasons for success and progress of people, particularly in the education sector, and we desperately need this in order to support e-learning in the Arab world.

V.5 Session E

TVET PORTAL – The Arab Gate to TVET

By Uwe Wieckenberg

The major intention to implement an internet based portal was to establish a community of practice in the fields of technical and vocational education and training (TVET) and e-learning in Arab countries. This portal furthermore should help to apply new forms of information exchange and knowledge transfer (Web 2.0) and to enhance the regional cooperation among Arab countries.

The basis to establish the TVET-Portal was a survey conducted in 2006 among TVET experts, technical teachers and managers in TVET institutions in Egypt, Jordan, Yemen and Syria. This survey showed on the one hand that there is a significant need for more communication and collaboration in the field of TVET. On the other hand the respondents have been using more and more the World Wide Web for research and collecting technical information they need for daily work.

It was obvious that these needs could be satisfied by an internet based portal, which also can be described as huge website, containing a vast amount of information and multiple ways of communication and cooperation.

The portal is especially emphasising the connection between TVET and e-learning which most certainly will be very beneficially in the near future.

Registered users of the portal can benefit in manifold ways: they have access to updated and relevant information, they easily can increase their professional skills and knowledge, they get assistance in solving problems in their day-to-day work, and they might expand their social and professional network.

The structure of the portal consists of two main parts.
a) The Portal itself with a "TVET Section" and an "E-Learning Section". Both of these sections include updated information about relevant news and events as well as information about TVET and e-learning Institutions in Arab countries. A special feature of the e-learning section is a direct link to e-learning courses which are provided by different TVET providers in the region or in Germany.

3. Structure of the TVET Portal

Portal
a) **TVET Section**
  - News & Events
  - Institutions
b) **E-Learning Section**
  - News & Events
  - Institutions
  - E-Learning Courses

Forum
Moderated discussion groups
a) **TVET:**
  - Quality Management
  - Public Private Partnership
  - ...
b) **E-Learning:**
  - Application Software
  - Usability
  - ...

both in Arabic and English language!!

b) The discussion area with about 15 moderated discussion groups, both in TVET and e-learning. Discussion groups for instance deal with "Sustainability in TVET", "Quality Management", "Public Private Partnership", "Usability in Web Design", "E-Learning Application Software", "Programming Languages" etc.

From time to time international experts will be invited to moderate a discussion forum and to share their expertise with users of the portal.

The unique characteristic of the portal including the discussion area is that the information and communication is in both Arabic and English language.

http://www.tvet-portal.net

UNESCO–UNEVOC TVETIPEDIA

By Max Ehlers

"A world without boundaries where technologies support education to build inclusive knowledge societies."

(UNESCO's Vision for ICT in Education)

In March 2009, the UNESCO-UNEVOC International Centre has launched "TVETipedia" an online portal for the exchange of information and knowledge about technical and vocational education and training (TVET) around the world. The idea was born facing the fact that the e-Forum is "old-fashioned" but popular – so the question rose: "How can we make sure that more users can profit from this wealth of information" and "How can we improve access of TVET experts to all this information?"

We therefore thought about "something like Wikipedia, but for TVET issues" and created the TVETipedia: A Portal for TVET Professionals.

Like Wikipedia it is in wiki format allowing easy access to information which is organised in wiki articles.

Key features are:
– It is an online portal for the exchange of information on TVET:
  Glossary, Best Practices, Country information, Workshops …
– It is based on easy-to-use "wiki" technology
– All internet users can read content
– After creating an account users can add/edit content, add links, connect pages, upload documents, etc.
– The quality is reviewed by UNEVOC editorial team and peers

TVETipedia: Content organised in wiki articles

Challenges:
– How can quality be assured?
– Will the "Digital Immigrants" accept the portal?
– Will wiki editing be too complicated for our focus group? How "easy" does editing have to be?
– What about the Digital Divide?
– What about languages?
– What is the critical mass of contributors?
– Will it be "yet another portal"?

Overcoming these challenges, TVETipedia aims to promote further TVET development and innovation and thus enable professionals involved in TVET policy planning, i.e. policy makers, researchers and practitioners around the world, to share information and experiences.

Telecentres' Cooperation with Local Target Groups for tailor-made Offers

By Aref Radhoueni and Lotfi al-Massoudi

The presenters have elaborated through their presentation:

– Different partners by Tele Center Initiative in Tunisia, which are supported by InWEnt Capacity Building International, Ministries, Tunisian Social Solidarity Union, The National Center for Training of Trainers and Training Engineering, NGO's and local institutions.
– The objectives of Tele Center Initiative are for example exchanging information experience, strengthening a systematic way for training and for pedagogic as well as providing different services for the target group.
– Target group for the initiative are women from rural areas, children as well as and youth from rural areas who are searching for jobs or training chances.
– Provided services from Tele Center are basic training in computer skills, different internet services, ToT and distance training.
– Infra Structure of Tele Center (Computers, Printers, Faxes, Laptops, Internet)
– The services of Tele Center are being implemented in cooperation with different partners to support sustainable development.
– Different Challenges of Tele Center are for example: few offers and contents of training, increasing demand for services of the Centers and helping target groups to establish small projects.

– How to meet these challenges: to meet the increasing demand of target group e-Learning services will be provided, Interactive Multimedia CDROM have been made by The National Center for Training of Trainers and Training Engineering in two important fields (feeding sheep's and processing of food products).
– Achievements of Tele Center: Defining exactly the training needs, taking into consideration different cultural and social aspects, developing pedagogical scenarios to help in training process, using many interaction tools such as videos, simulations and text, provide tailor made training courses for different target groups.

IT Education Policy
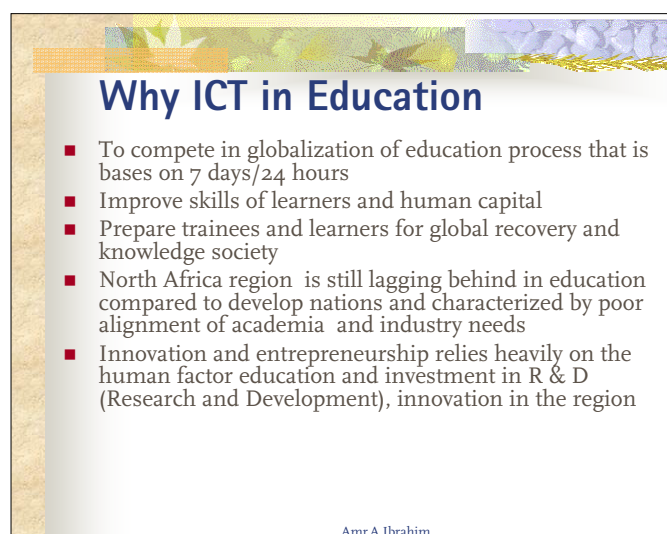## North Africa and Middle East

By Amr Ibrahim

The education process is a major issue of concern in most developing countries and especially the Middle East and North Africa. Rapid changes in the infrastructure, the internet, and by multimedia computing and communication have a great impact on the educational system.

"One of the main factors shaping education and development challenge is the internet as well as information and communication technology (ICT). These globalizing developments create a new paradigm in this network age."

(Amr Ibrahim)

Organisations need the most advanced skills, most updated equipment and access to training, to be able to remain competitive. Organisation and education are shifting from the traditional class room walls to a globalized and borderless world, where educational ideas flow across the globe. One of the main factors shaping education and development challenge is the internet as well as information and communication technology (ICT).

Why ICT in Education

- To compete in globalization of education process that is bases on 7 days/24 hours
- Improve skills of learners and human capital
- Prepare trainees and learners for global recovery and knowledge society
- North Africa region is still lagging behind in education compared to develop nations and characterized by poor alignment of academia and industry needs
- Innovation and entrepreneurship relies heavily on the human factor education and investment in R & D (Research and Development), innovation in the region

Amr.A.Ibrahim

These globalising developments create a new paradigm in this network age.

Demands in education and training are increasing the interest in e-learning on a daily basis. The need for less expensive and rapid tools and means to deliver training has led many educational and training institutes to explore the option of e-learning. The convenience for users of the programs, at their own place, and the engaging nature of the multimedia delivery are big advantages. The centralised nature of web-delivered training makes the delivery standardized for all users who take the course. Blended e-learning is often a less expensive and more convenient alternative.

Mr. Ibrahim Amrs presentation reported about a research conducted in the context of the International Handbook for IT in Primary and Secondary Education, specifically for the Section on 'International and Regional Programs and Policies' regarding Europe, North America, Pacific-Asia, Latin American and Caribbean, Sub-Saharan Africa, Middle East and North Africa. The research approach was: Each author was asked to write a document describing the educational policy and IT situation in schools in their region.

Observations:
- The level of introducing and implementing IT in schools depends on the level of economic development in region.
- There is a widespread understanding and agreement that knowledge and ICT is needed for every student.
- In most countries there is a successful introduction of ICT in schools following a logical sequence of events: initiating a policy, providing technical ICT infrastructure and teacher training.
- In most developed countries the sequence of events continues to the infusing phase and to the aspiration for pedagogical and curricular change as well as content development.
- However the use of ICT as a pedagogical tool in subject areas is not a major success: issues become more complex and more intangible for measuring impact.
- As a reaction there is a strong movement to change the 'atmosphere' around ICT by redefining it as e-learning, online learning, virtual or electronic learning environments, etc.
- Basically this change in terminology is more than just a change of words: also because of the lack of convincing impact evidence, policy is fading away from an explicit focus on ICT and is moving towards a broader perspective of using ICT to support qualifications and competencies.

– The goal of the research was also to identify major elements in a policy that contribute to its success. However, in the research about the regions not much emphasis is given to explicit results, effects or impact of the policies described. This is not because of lack of focus by the authors, but because of lack of convincing evaluation and assessment results. Often it is argued that introducing IT in schools can only become successful if it leads to a transformational change of the system. However, there are some experiences indicating that transformational changes using IT as a lever create very serious, even existential problems within the current system.

Summary policy recommendations
– Focus on the affordances ICT creates, not only in schools but also in society at large, to support the integration of formal and informal learning.
– In developing countries, stimulate the availability of ICT, including the technical network infrastructure, in and outside the schools (as is done for instance by the 'One Laptop Per Child' (OLPC) project).

Conclusion

In order to simulate ICT in education in every village in North Africa & M.E:

• Creating awareness among policy makers, vision, regulation and reform
• Integrating ICT in the very life of schools as an educational solution
• The importance of SME's innovation and education entrepreneurs and their initiative for development of education using ICT and leading change
• The importance of professional managers, experts, and advisors for planning and executing policy

Amr.A.Ibrahim

V.6 Session F

The Télécentres Web Portal – A Learning Perspective

By Salim Baba-Ahmed

The Project in brief:
It is supported by InWEnt and aims mainly at:
- Helping partner institutions in Algeria and Tunisia to build up and manage 12 télécentres, including 5 "mobile" télécentres, as pilot projects, through:
  - training managers and trainers of the TCs, as well as the steering committees.
  - helping to develop training products and assist the partner institutions in setting up a web- portal, providing specific training and information for the target groups
- Providing access to computers and internet for – disadvantaged - target groups in remote rural areas, in particular women:
  - providing lower income groups with access to modern information and communication technologies and thereby improving their job opportunities.

As a way of introducing internet technology to the target populations, a web portal was built with the support of InWEnt to focus mainly on:
- Human resources training
- Offering web-space and access to other Ministry departments, having somewhat the same concerns and dealing in a way or another with the same target population groups, such as the Health Ministry, the Sports and Youth Ministry, the Ministry of National Solidarity…
- And above all, providing learning content both for online and offline training sessions
- Opening the perspective of a wide networking prospects between the TC and other TCs in the Maghreb and the world

With regard to the technical aspect CMS represented the ideal tool because it allowed a multi administration possibility, since many persons were involved in the process of editing and updating the portal.

Now we can offer different courses for example Microsoft to initiate the target population to modern technology.

The Portal : A Learning initiative

As a learning initiative the portal provides :

1. A web-sharing space for the trainers through providing links to interesting learning content on the web.
2. Access to the CNEPD LMS (learning Management system) for online content
3. Multimedia content such as videos (from the web and videos built by CNEPD)

Microsoft courses

Since the primary objective was to initiate the target populations to modern technology and urge them to use the computer , and internet in their everyday life, focus was made on teaching the Microsoft office suite and internet …

–The courses are interactive , multimedia and Scorm compatible courses.

They deal mainly on :

1. computer basics
2. Digital lifestyle
3. Internet and the World Wide Web
4. Productivity programs : word , excel PowerPoint …

In order to increase job opportunities of the target populations, some training content was made available to the trainers on CDs such as Haircut training programs, tailor training etc.

CRYSTAL Online Library for TVET

By Matthias Giersche

Does e-learning or blended learning add value to our TVET Programs world-wide? This was the key question the BMZ project "Crystal" was dealing with in his last phase.

Based on the assumption, that e-learning – as a new form or even revolution in teaching – can enhance the outputs of TVET training world-wide, the Crystal team started to evaluate over fifty TVET projects and programs of the German development assistance to prove this conclusion.

Yet, the problems to evaluate the impacts of e-learning were manifold, as TVET projects normally do not monitor the impacts of e-learning directly. What they usually measure are the impacts on the objective level. Thus, the M+E of the projects were looking for an improved employability among the graduates or – more generally spoken – the question should be answered: Was the training after the intervention more relevant to the labor market?

Facing these difficulties the Crystal project tried a unique approach to find evidence of the add value of e-learning in TVET projects.

GTZ Top Management appointed working groups to evaluate potentials of e-learning for in-house training. But there was no data available in over 50 projects on the impacts of e-learning!

The Approach

Conducting interviews with key stakeholders in over 50 projects world-wide about their experiences with e-learning!

The Approach

Interviews with key stakeholders in over 50 projects world-wide about their experiences with E-Learning!

What GTZ Learnt from Crystal

- E-Learning supports GTZ understanding of learning – Learning to develop competencies and not only to transfer knowledge!
- It is a appropriate way for in-house training
- Blended learning is preferred

> Crystal results integrated in the new GTZ-Business-Plan E-Learning!

The Results

Micro Level:
– Learners started to learn problem-oriented and developed problem solving strategies in blended learning forms of e-learning
– Participants developed motivation to learn by them self or with others in networks
– New influences initiated a new thinking about the own professional future
– In the session the results of Crystal were presented and recommendations were given for marketing purposes how best e-learning can enhance the impacts of TVET interventions in a changing learning culture

Meso Level:
– The role of the teacher changed – learning moderator
– Learning networks appeared

Makro Level:
– Management widened its understanding of education

But also: Do not believe in "IT-Wonders"!
1. E-learning is a resource and is no substitute for "old" didactics! Consider e-learning as an "extended black board"!
2. You cannot download competencies!

Localisation Makes a Difference: Good Marketing of Online-based TVET Products

By Edgar Wang

Online-based trainings need to be localised. Even if an identical online course is delivered in two countries, it is not the same offering. The effect on the market (learners) may be different, according to the situation, interests and needs of the learners and other local stakeholders.

Good marketing is based on identifying the way how these stakeholders perceive the value of training products.
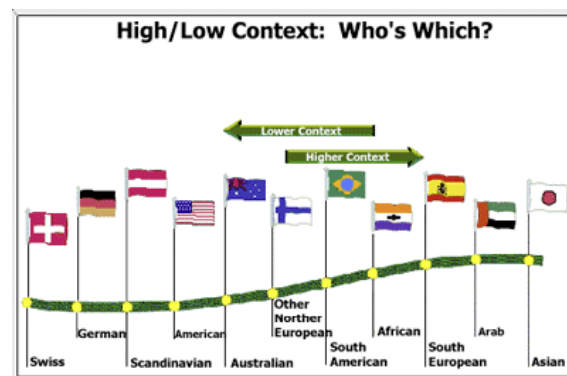

Marketing of Training Products

Customer

- Education is achieved in social processes
- Education is interactive
  ... organised
  ... regulated
- Training products have multiple target groups

Corporate   Competitor

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5

If online trainings are to improve the performance of learners and their organisations, their implementation has to take into account both individual and organisational objectives. Localisation exceeds the translation and intercultural adaptation of course materials.

Cultural Differences 1

High/Low Context: Who's Which?

Lower Context
Higher Context

Swiss   German   Scandinavian   American   Australian   Other Norther European   South American   African   South European   Arab   Asian

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The presentation referred to the practical example of a blended learning course for public health and clinical experts illustrating that this training, which would not have been implemented in Germany, has run successfully in China for several years. Therefore when creating and implementing e-learning activities the impact of localisation dependant issues is a crucial point to consider.
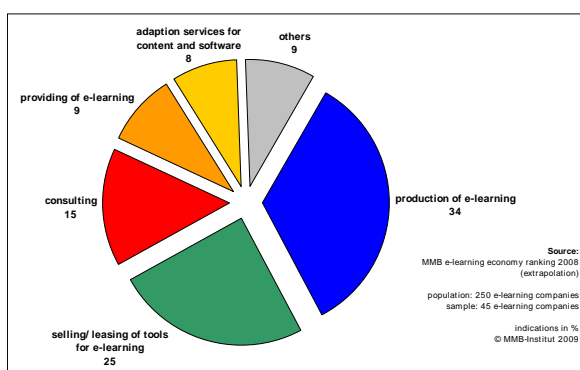
Evaluation and Monitoring of the E–Learning Sector

By Dr. Lutz P. Michel

The e-learning sector is still a quite new market that is character-ised by a great variety and heterogeneity of those who play a role in that market. Among the suppliers of e-learning are companies with roots in technology (IT hardware and software), publishing (content), classical education industry (didactics) as well as con-sulting. Besides, there is a growing number of new companies that are genuine e-learning suppliers (often full service providers). The market of e-learning users is as inhomogeneous as the sup-pliers market. Besides large multinational enterprises (which have implemented e-learning all over their company), the branch includes small and medium-sized enterprises (which have been partly cautious about introducing e-learning).

Last but not least, there are schools and universities as well as sin-gle learners (who book courses with one of the providers).
The lecturer gave an overview of the structure and the develop-ment of the e-learning market and characterised the users of dig-ital learning with their interests and expectations.

Example: Market share of E–Learning branches in Germany

Further a scenario of 'E-Learning of the future' – based on an expert survey which was carried out by the MMB-Institute a few weeks ago was sketched (see below):

Example: Dominant groups in 4 learner clusters

Example: Three important trends for the future of E-Learning (year 2012)

Conclusion and future prospects

- Evaluation and monitoring provides essential information for e-learning providers, users, and funders
- You can do it yourself
- We should compare our methods and results (e.g. Europe / MENA states)

VI. Appendix

Conference

Challenges of TVET in Arab countries – Innovation through E–Learning

Amman, 12th – 13th of October

General chair: InWEnt
Co-chairs: VTC, PVTD, NCHRD, ETF, UNESCO-UNEVOC

Day 1:		
Time	Session	Item
9.00 -10.00	**Registration and Greeting**	*Ongoing*
10.00	**Official Opening**	**H.E. Ghazi SHBEIKAT**, Minister of Labour Jordan **Dr. Luiz RAMALHO**, InWEnt **H.E. Majed HABASHNEH**, VTC
10.45-11.00		Coffee Break
11.00-12.30	**Keynotes**	The TVET sector is facing enormous challenges. At the same time the importance of e-learning in professional training and further education is constantly increasing. There are structural challenges and transformational processes associated with this. – What role does e-learning play in connection with these structural implementation processes? – Which role is attributed to e-learning in the working world regarding structural changes? – What can be achieved with e-learning? **Dr. Klaus BADER-LABARRE**, InWEnt: E-learning: a passed hype or a real opportunity to foster employment-oriented, sustainable Vocational Education and Training? **Ali NASRALLAH**, Chamber of Industry, Jordan Challenges and Trends in Technical Vocational Education and Training from a labour market perspective **Ulrike DAMYANOVIC**, ETF: Harnessing new technologies for education: Lessons learnt and future options. Moderator: Susanne KOLLMEIER
12.30-14.00		*Lunch break*

14.00-15.45	**Panel discussion**	Developing qualified personnel in line with labour market requirements poses a significant challenge to educational providers.
		– How can E-learning contribute to this?
		– Is E-learning a driver for private sector engagement?
		– How can enterprises realise the potential E-learning represents?
		Michael HAERTEL, Federal Institute for Vocational Education (BIBB), Germany
		Haif BANNAYAN, Jordan Education Initiative, Jordan
		Dr. Zeyad ALNSOUR, Queen Rania Center for Information Technology, Ministry of Education, Jordan
		Ala SAID, Talal Abu-Ghazaleh Organization, Jordan
		Signe BALINA, Latvian Information and Communication Association, Latvia
		Moderator: Susanne KOLLMEIER
15.45-16.15		Coffee Break
16.15-17.00	**Plenary Session**	**Presentation of the new TVET Portal for MENA region – The Arabic Gateway to TVET**
		The importance of online-networks continues to increase in the course of regional and international cooperation and the further development of IT media. E-learning communication portals are on the advance.
		– What can such portals do?
		– What requirements are connected to this for the provider as well as the users of the portal?
		– What limitations do exist and how can they be overcome?
		Joint regional initiative for promoting E-learning – Representatives of Partner Institutions:
		Martin PURPUR, InWEnt, Germany
		Mohammed Mahmoud TANTAWI, PVTD, Egypt
		Sohail NAOURI, VTC, Jordan
		Uwe WIECKENBERG, Institut für Bildungstransfer e.V., Germany
		Moderator: Susanne KOLLMEIER
12.30-14.00		*Lunch break*
19.00		**Official Dinner (only for separate invited participants)**

Day 2:		
10.00–10.30	**Plenary Session**	Introduction to day 2 Moderator: Egon Fleischer
10.30–12.30	**Official Opening**	**Parallel Thematic Sessions**

11.00–12.30	**Session A**	**New Approaches in Teacher Training**
		E-learning opens new possibilities of Internet-supported forms of learning independently of classic "seminar schedules" – also in the area of advanced training for teachers.
		– What challenges are connected with this for the teachers?
		– What changes are subjected to teacher qualifications?
		
		Existing approaches and good practices
		    Prof. Dr. Abdelhafid BENMOUSSA, Directeur Informatique, Institut Multihexa, Maroc
		
		Quality assurance and quality management through E-learning
		    Yousef ARIKAT, Al-Quds Open University, Palestinian Territories
		
		Presentation about the achievements of the division for E-training
		    Sohail NAOURI, VTC, Training and Development Institute, Jordan
		
		Good practice approaches of policy
		    Warda SEMMANE, Conseiller, Cabinet, Ministère de la Formation et de l'Enseignement Professionnels, Algeria
		                      Moderator: Ulrike DAMYANOVIC

	Session B	**Contribution and Role of Private Sector**
		A stronger involvement of the private enterprises into TVET is widely acknowledged as a key for TVET improvement. A dynamic supply and demand market driven largely by private sector engagement has developed.
		– What types of Public Private Partnership do exist?
		– Why does the private enterprise employ IT media in further education?
		– Are there successful business models?
		
		Cooperation model with the private sector in developing multimedia teaching material for the Mubarak Kohl Initiative (MKI)
		    Ali SAYED, Counsellor to the Minister of Education for International Cooperation and Director of Mubarak-Kohl Initiative, Egypt
		    Khaled KARARA, Deputy Head of Division Development Cooperation, German Embassy, Egypt
		
		Best Practice: EBC*L – How to become competent in business management with E- and Blended Learning
		    Victor MIHALIC, Chief Executive Officer for EBC*L International, Austria
		
		Purpose and advantages of Private-Public-Partnerships in TVET (CBTs, WBTs, Virtual Classroom, Online Seminars)
		    Nevine EL KADI, Regional Manager Middle East & Africa, Cisco Networking Academy, Egypt
		
		Increasing the efficiency and labour market relevance of TVET through E-learning
		    Silvia LUBER, Managing Director of Time2Learn, Germany
		                      Moderator: Munir ASAD

	Session C	**Methodological and Didactical Aspects of E-learning**
		E-learning is more than a scanned book. It is becoming an interactive teaching method through the use of didactic media tools.
		– Which methodological and didactical aspects are to be considered in the development of web-based learning units?
		– How are the forms of e-learning linked didactically with traditional forms of learning?
		
		Introduction – Elements of E-Didactics
		    Uwe **WIECKENBERG**, Managing Director of Institut für Bildungstransfer e.V., Germany
		
		InWEnt Alumni – ICT Learning Management:
		
		Computer Based Training
		    Mohamed **ALKILANY**, PVTD/STI Cairo, Egypt
		
		Web Based Training
		    Murad **RAWASHDEH**, VTC Amman, Jordan
		
		Virtual Classroom
		    Georges **MELKI**, IPNET Beirut, Lebanon
		
		Online Seminars
		    Aziza **MAHMOUD**, MKI Alexandria, Egypt
		
		The need of special E-Didactics in TVET
		    Passant **SOBHY**, Consultant for education projects, Egypt
		
		Moderator: Uwe WIECKENBERG

10.45-11.00		*Coffee Break*
14.00 -16.00		**Parallel thematic sessions**

11.00-12.30	**Session D**	**Free and Open Source E-learning Application Programmes for Interaction and Collaboration**
		More and more, the application of e-learning is supported by freely available and cost-effective products. This is an important premise for a broad application of e-learning.
		– Which tools – open source or otherwise – can be used as a supplement (or also as stand-alone tools) in e-learning?
		– What do these achieve?
		
		Creating a multilingual online-based technical dictionary
		    Dr. Frank **RENKEN**, Project Coordinator GTZ, Germany
		
		Web 2.0
		    Prof. Dr. Malte **BEINHAUER**, HTW Saarland, Germany
		
		Utilizing Moodle Learning Management System for TVET
		    Ismaeel **HAZOURI**, Projects Manager Smartway **Inc., Saudi Arabia**
		
		Moderator: Susanne KOLLMEIER

	Session E	**Enhancing Regional and International Cooperation Through Learning Communities/Communities of Practice** E-learning communities are becoming increasingly more important. It is clear that learners will tend to learn with each other in the future and will more frequently use online learning communities as a means of furthering their professional education. – Which usage scenarios have proven themselves successful? – What are the advantages and disadvantages? **TVET Portal as community of practice for the region** 　Uwe WIECKENBERG, Managing Director of Institut für Bildungstransfer e.V., Germany **UNESCO-UNEVOC TVETIPEDIA** 　Max EHLERS, IT specialist for UNESCO-UNEVOC, Germany **Telecentre's cooperation with local target groups for tailor-made E-learning offers** 　Aref RADHOUENI, Centre National de Formation des Formateurs et de l'Ingéniérie de Formation & Lotfi MESSAOUDI, Union Tunisienne de Solidarité Sociale (UTSS), Tunisia **Learning and IT Policy in the Middle East** 　Dr. Amr IBRAHIM, American University Cairo (AUC), Egypt Moderator: Munir ASAD
	Session F	**Marketing of TVET Services and Products** E-learning contributes to the image improvement of education providers and the marketing of such training is necessary. Targeted marketing is fundamental. Adaptations within the framework of marketing management are necessary through this new product that is e-learning. – What activities can be used to reach the external market? – What form should the products take? **Telecentres in Algeria and Tunisia as service providers via their web portal** 　Salim BABA-AHMED, Ministere de la Formation et de l'Enseignement Professionnels, Algeria **CRYSTAL online library for TVET** 　Matthias GIERSCHE, Adviser Knowledge Management, GTZ, Germany **Localisation makes a difference: Good marketing of online-based TVET products** 　Edgar WANG, Consultant for educational projects and member of the Scientific Council of LEARNTEC, Germany **Evaluation and monitoring of E-leaning sector** 　Lutz MICHEL, Managing Director of MMB-Institute for Media and Competence Research, Germany Moderator: Egon FLEISCHER
16.00- 16.30	**Coffee Break**	
16.30-17.30	**Closing ceremony**	**Wrapping up of thematic sessions** **Outlook for the future:** Joint initiatives for the future

Speakers

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