Salutation
It is a pleasure to take part in this the First China (Shenzhen) International Technical and Vocational Education Summit Forum. More importantly, it is also a great pleasure and an honour to do a presentation at this Forum.

Introduction
My presentation is on the topic: “Improving the quality of education and training (systems, institutions and programmes) through the UNEVOC Networks”. Questions such as ‘what is quality education and training?’, ‘how can education and training meet the needs of learners and the world of work?’, ‘what strategies can be deployed to improve the quality of education and training?’ are often asked by education and training practitioners. This is so because constant work-place changes necessitate the continuous search for quality, relevance and excellence in the arena of education and training. Additionally, the interest in and concerns for effective and efficient education and training programmes occupy an important place among policy-makers and practitioners. Therefore, the topic of my presentation should have a familiar ring to many in this Technical and Vocational Education Summit Forum. The themes of the Forum, in particular those related to access, equity, quality, linkages and education and business partnerships are not far removed from the goals and objectives of the UNESCO Technical and Vocational Education Programme (1999) as a whole, which are: to strengthen Technical and Vocational Education; to orient TVET for sustainable development; and to provide TVET for all (UNESCO, 1999). Further explanations of the programme will follow in due course. In the presentation I attempt to explain how UNESCO through the UNEVOC Network intends to assist its Member States to improve technical and vocational education and training (TVET). I describe the UNEVOC Network, and how the UNEVOC Network as a system and strategy for learning can contribute to improving the quality of education and training. In conclusion I summarise how the UNEVOC Network can be made beneficial, and how the barriers to the effectiveness of this strategy and
A clarification of terms such as ‘improving’, ‘quality’, ‘education and training’, and ‘networks’ is necessary. The Pocket Oxford Dictionary (1996) states that to improve is to become or make better; suggesting movement to a desirable and satisfactory state; and in countries where standards or norms are used, this would refer to progression to the satisfactory standard. The word ‘quality’ refers to attributes bearing the capacity to satisfy wants, needs and meeting certain standards (Jianrong Zhang, 2003). In education and training the capacity refers to effectiveness and efficiency in the process of learning. The learning should lead to satisfactory outcomes for learners, employers and sponsors. The phrase ‘education and training’ is taken to mean vocational education and training, be they pre-employment courses or post-employment courses. By the term networks is meant connections, links or relationships, and in the case of the UNEVOC Networks these refer to links of vocational educators in charge of, and institutions that are, UNEVOC Centres.

**Improving quality a common pursuit in education and training and why the pursuit**

Improving the quality of education and training is a common pursuit of providers and practitioners of education and training in many countries in the developing and developed worlds. Symptomatic of the prevalence of the quest for quality are the various references in the popular and academic press, and in analyses of international agencies of education and training reform initiatives to national qualifications frameworks; training funds; and utility of workplace and institutional training in developing suitable skills, knowledge and attitudes (Herschback, 1997; ILO, 2002; Jean Searle, Irena Yashin – Shaw, & Dick Roebuck, 2003; and UNESCO, 1999).

Perhaps nowhere is the pursuit more evident than in the adoption by a number of countries in Africa, Asia and the Pacific, and Europe of education and training policies and practices imbued with notions of ‘demand-driven’, ‘employable skills’, ‘outcomes-based training’, ‘qualification frameworks’, ‘technical and vocational education commissions or councils’, and ‘training to industry standards’ (Jean Searle, et al, 2003; and Gerhard Kohn, Joseph Rutzel, Hans-Gunter Schroeder, Stefan Ziehm (eds.) 2000). Importantly, the adoptive actions are indications of dissatisfaction with the performance of education and training institutions. A variety of groups, namely governments, sponsors, learners, employers, and practitioners want satisfactory results from their investments in education and training. They want satisfying results for
different reasons, most of which boil down to wealth generation. To
governments, employers and proprietors of education and training institutions,
beyond the wealth generation are imperatives of innovation and development.
Interventions of the innovation and development genre seek to renew and
modify systems, institutions and programmes in order to suit the demands of
changing situations. Adding a sense of urgency to the pressure for quality in
education and training are global trends, such as globalisation, technological
developments, and demographic changes. Globalisation and information and
communication technologies are changing workplaces, the nature of work and
its organisation, and employment trajectories of individuals. For example new
occupations are emerging. There is a conflation of boundaries of a number of
occupations; while some old occupations have disappeared. Where narrow
technical competencies used to suffice, broader and diverse skills are needed.
For instance,

“a car mechanic must have diagnostic skills and knowledge, be
customer oriented, have all the skills of the trade …, must take
into account the ecological effects … be able to calculate the
cost of repair …
“A farmer or horticulturalist must be knowledgeable in biology,
chemistry, management, marketing, engineering … and have
customer orientation … be able to find and exploit niches in the
market” (Hermann Schmidt, 1999, p.6). Also, the changes in
workplaces call into question the front-end models of education and training,
whose chief motivation is the preparation in advance of learners for lifetime
jobs (Paul Hager and Terry Hyland, 2003). These training and employment
scenarios are fast becoming out of sync with the conditions in the modern
sector of the world of work. Relevant and quality education and training should
instil into learners the skills and disposition for a life - time of learning, in
addition to providing broader skills and knowledge. Compounding the question
quality and relevance is the need for articulation between secondary higher
vocational education programmes and university courses, and, also, the extent
to which mobility can occur between technical and vocational programmes and
academic programmes (Haas, 1999). There is disfavour among learners and
communities for TVET programmes that lead to dead ends.

**UNEVOC Network – a system and strategy to improve quality of
education and training**

There are any number of strategies to deploy in order to meet the challenges
that are paused by the dissatisfaction with education and training. The
UNEVOC Network is one of the strategies. It is at once a strategy and a system for learning. It is one of the strategies adopted by the UNESCO TVET Programme. To be effective the selected strategy to improve education and training has to be holistic, since there are many interrelated aspects to quality education and training. Herschbach (1997) explained this well when he wrote: “Training, moreover, must be conceived as a system to be effective … For example, to train only teachers, but not administrators, creates a weak link. And it does little good to invest in new facilities and equipment if teachers are not trained in how to manage and maintain them”(Herschbach, 1997, p.90). In other words, the interventions should be directed at the system as a whole and not to a few elements.

The UNEVOC Network is a UNESCO international network in the area of TVET. It is made up of UNEVOC Centres that are established by various UNESCO Member States on the advice, encouragement and promotion of the UNESCO – UNEVOC International Centre in Bonn, Germany. According to the guidelines to join the UNEVOC Network, there can be one or more UNEVOC Centres in a country. UNEVOC Centres are focal points and conduits for the dispensation of UNESCO - UNEVOC International Centre assistance in TVET. They have obligations to develop and play lead roles about TVET in their countries.

The UNEVOC Network is a web connecting practitioners and their institutions to one another. It is a network of social connections and relationships at individual and institutional levels. The connections and relationships are sources of learning and learning resources. They are sources of knowledge, expertise and help that can be instrumental in learning. The institutions per se are reservoirs of various kinds of knowledge and expertise. All these can be instrumental in individual learning, collaborative learning and others learning. They can be deployed in interventions to improve and innovate systems, programmes, and management of institutions.

The UNEVOC Network came into being in the early 1990s when UNESCO, in a bid to assist its Member States in developing and improving TVET, began to promote the formation of UNEVOC Centres in individual countries. To-date there are over 230 UNEVOC Centres in 158 countries. Some are located in bodies responsible for TVET such as departments, commissions and councils, and others are found in technical colleges and polytechnics. And yet others are found at centres in universities. Thus, there is enormous variation in the types
and functions of the institutions and their geographical spread, making the UNEVOC Network not one network, but several networks. From such diversity of UNEVOC Centres can be got a range of learning resources, such as best practices, lessons learnt, expertise, models, knowledge, experiences and alternative solutions on various aspects of TVET from access and equity to learning content, learning processes and assessment. In addition to the UNEVOC Network, the UNESCO – UNEVOC International Centre has an email discussion forum, the E-Forum, which is another network.

Fostered by the UNESCO - UNEVOC International Centre, the UNEVOC Network links professionals, institutions and expertise in the arena of TVET – creating the system for learning. The learning resources available in the UNEVOC Network and their probable accessibility make it unnecessary and not cost-effective for UNEVOC professionals ‘to re-invent the wheel’, when they are called upon to find solutions to challenges to improve the quality of education and training. This is more so because the information and communication technologies make communication and exchanges of information and framework materials almost instantaneous. However, the UNEVOC Network strategy and system for learning are as effective as the national UNEVOC Centres are, and of utility to the extent they fulfil their obligations.

**How does the UNEVOC Network assist in improving the quality of education and training?**

The UNEVOC Network provides various services towards the improvement of the quality of education and training. At the centre of the services is a system for learning. (The main direct beneficiaries of the services are UNEVOC Centres and professionals in developing countries, countries in transition, and countries in post –conflict situations). Learning permeates the UNEVOC Network strategy. To deliver the services, it deploys multiple approaches. The approaches fall into two categories. First are actions and activities that are undertaken by UNEVOC Centres. Depending on the purposes and magnitude of funding, these can be national or sub-regional. The second category comprises the actions and activities of the UNESCO - UNEVOC International Centre. Since the UNEVOC Network is non-hierarchical and is joined by common origins and interest in TVET, the approaches are characterized by:

- Interdependence;
- Collaboration;
- Consultation;
- Colleagiality; and
- reciprocation.

Approaches of UNEVOC Centres

UNEVOC Centres should document and should gather information on national best practices, innovations, and expertise. Also gathered are UNESCO messages on TVET such as recommendations, conventions, declarations, and other relevant UN norms and standards. Necessary assistance to undertake all these actions is provided by the UNESCO – UNEVOC International Centre. The purposes for gathering the various learning resources are to disseminate to practitioners at national levels; to share with UNEVOC Centres in other countries; and to contribute to knowledge building in the UNEVOC Network. The dissemination can be carried out through national seminars, workshops, publication and distribution of materials. For the learning resources to be widely known to the UNEVOC Network as a whole, UNEVOC Centres should report these to the UNESCO – UNEVOC International Centre. At the UNESCO - UNEVOC International Centre these can be re-packaged for distribution, and publicized on the web –site and through a newsletter.

One other approach is to engage in trans-national cooperation. Engaging in trans-national cooperative activities can lead to learning of various kinds and exposure to alternatives. The learning can be that of individual UNEVOC professionals and vocational leaders as well as that of other professionals. This mode of learning corresponds to that described by Coe and Bunnell (2003) when they wrote about learning occurring in communities of practice from “engagement … competence development helped by training and encouragement of initiative … reflection supported by retreats, time off and conversations and exploration” (Coe & Bunnell, 2003, p. 447). Reflection and adaptation on the inter-changes can follow at national and regional levels, resulting in the construction of locally relevant frameworks, models and practices. Objects for the engagement could be collaborative activities, say, undertaking joint studies, meetings of experts or consultations on development of methodologies and frameworks on common pedagogical questions. Through the inter-changes, insights can be obtained and knowledge generated by UNEVOC professionals. Other effects of transnational engagement are increased bonding and trust with other UNEVOC professionals, which, among other effects, enhance the chances of getting positive outcomes from inter-changes.
Approaches of the UNESCO - UNEVOC International Centre

Developing the capacity of the UNEVOC Network, fostering and orchestrating the inter-changes and knowledge transfers in the UNEVOC Network are some of the foremost goals of the UNESCO – UNEVOC International Centre. To fulfil the goals, a number of modalities are utilized. Prevalent modes of action to develop the capacity, to foster the transfer of knowledge, and to mobilize learning resources are: studies, publications, consultations, meetings of experts, and conferences. Through such activities knowledge is generated, and practices and experiences exchanged. Other commonly employed approaches involve training. The training approach can be in the form of the following: experts consultations, national seminars and workshops, sub-regional and regional seminars and workshops, and regional and international conferences. The events expose UNEVOC professionals to good practices and success stories or failures of other countries about improving the quality of education and training. Also, through the training events the UNESCO – UNEVOC International Centre creates conditions for face to face interaction, and verbal exchanges on TVET innovative policies and practices, which enable the transfer of knowledge and expertise that is embedded in individual UNEVOC professionals (Linda Argote and Paul Ingram, 2000). Through its publications and web-site it promotes, encourages and fosters the transfer of information, expertise, best practices, success stories, failures, lessons, frameworks among and between UNEVOC professionals throughout the network.

To help UNEVOC professionals to initiate and maintain connections and interactions, as well as to identify who to contact in search of assistance, the UNESCO - UNEVOC International Centre produces a UNEVOC Directory. The UNEVOC Directory gives information on UNEVOC Centres, the institutions where they are located, and the professionals in charge of the UNEVOC Centres. Other services conducive to learning are offered through schemes of Mobile Training Teams, fellowships, small grants and attachments, and mentoring. The E-Forum provides a platform to attract assistance from special interest groups that are part of this loose community. Other support conducive to learning is offered through schemes of Mobile Training Teams, fellowships, small grants and attachments, and mentoring.

Reference has been made before to norms and standards in the area of TVET in connection to UNESCO messages. The normative instruments are born of the standard –setting mandate of UNESCO in its spheres of competence.
They are an embodiment of international principles on TVET. Foremost normative instruments about TVET are the Convention concerning TVE (1989), the Recommendations of the Second International Congress on TVE (1999) and the Revised Recommendation (2001). It is one of the objectives of the programme of the UNESCO –UNEVOC International Centre to disseminate the norms and standards and other UNESCO messages. Through the dissemination activities, the messages and norms enter national discourse on TVET.

Conclusion

UNEVOC professionals tasked with assignments at national levels to improve the quality of any dimension of education and training need not grope in the dark in isolation for lack of information about best practices, lessons learnt, frameworks, and examples. There are more than links of institutions in the UNEVOC Network: there are social assets for learning to be got. Networks give “more brainpower, more organizational capacity and more lobbying potential” (Chikurov, 2000). The UNEVOC Centres can be repositories of local best practices, expertise, knowledge, and lessons learnt. Important factors to successful networking are a strong national network, collegiality, trust, knowledge sharing, communication, cultivation a culture of correspondence, and easy access to knowledge (Richard Maclure (ed.) 1999). The active support of vocational education leaders is needed to build an effective national UNEVOC Network.

What implications does the foregoing hold for those UNEVOC professionals desirous to benefit from UNEVOC Network? Being a UNEVOC alone does not guarantee access to solutions to problems, to regional and international best practices, and success stories. It takes pro-activeness, regular connectedness to other UNEVOC professionals, active collaboration, and bonding with other professionals for the UNEVOC Network as a whole to be effective. It is crucial to maintain effective links between UNEVOC Centres, and to participate actively in the activities organized or sponsored by the UNESCO -UNEVOC Centre. Also, success entails efficient and effective use of the resources and expertise obtainable from the UNEVOC network. Sporadic communication and interchanges hamper effective UNEVOC networking.
References

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