



## Meeting Report

# International Expert Meeting on Education and Training for the Changing World of Work:

Meeting the Demands of the Business Environment

Hangzhou, China  
7-9 December, 2009



**UNEVO**

International Centre  
for Technical and Vocational  
Education and Training





## Meeting Report

### **International Expert Meeting on Education and Training for the Changing World of Work: Meeting the Demands of the Business Environment**

organized by

**UNESCO-UNEVOC International Centre for  
Technical and Vocational Education and Training**

and the

**Chinese National Commission for UNESCO**

with the support of

**Zhejiang Technology Institute of Economy  
Zhejiang Materials Industry Group Corporation**

and

**UNESCO Hanoi**

Date: 7 to 9 December 2009

Venue: Media Hotel, Hangzhou, China

Type: International Expert Meeting

For Further Information

UNESCO-UNEVOC International Centre  
for Technical and Vocational Education and Training

UN Campus, Hermann-Ehlers-Str. 10

53113 Bonn, Germany

[info@unevoc.unesco.org](mailto:info@unevoc.unesco.org)

<http://www.unevoc.unesco.org>

Phone: +49 228 8150-100

Fax: +49 228 8150-199

Cover photo © UNESCO

Copyright of presentation excerpts is owned by the respective author

All rights reserved

© UNESCO 2010

ISBN 978-92-95071-08-7

This document can be downloaded in PDF format from:

<http://www.unevoc.unesco.org/publications>

The choice and presentation of the facts contained in this publication and the opinions expressed herein are not necessarily those of UNESCO and represent no commitment on the part of the Organization. The designations employed and the presentation of material throughout this publication do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area or of its authorities, or the delimitation of its frontiers or boundaries.



## Table of Contents

I.	BACKGROUND	1
II.	PARTICIPANTS	2
III.	ADMINISTRATIVE ARRANGEMENTS	2
IV.	ORGANIZATION OF THE MEETING	2
	1. Opening Ceremony	2
	2. Participants' presentations	3
	Theme 1: TVET Curricula Development and Delivery	3
	Theme 2: Research and Innovation on School to Work Transition	5
	Theme 3: Recognition, Certification, Accreditation and Quality Assurance in TVET Teacher Education	7
	3. Field visit	10
	4. Networking and Dissemination of Best Practices	10
	5. Official Closing of the Seminar	11
V.	MEETING COORDINATORS' SUMMARY	12
VI.	FOLLOW UP	13
VII.	APPENDIXES	13
	A. List of participants	14
	B. Programme outline	20



## I. BACKGROUND

With the aim to strengthen UNESCO's assistance to Member States to improve their technical and vocational education and training (TVET) systems and practices, in line with UNESCO's Education for All Goal 3 relating to "Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes" ([www.unesco.org/education/efa/index.shtml](http://www.unesco.org/education/efa/index.shtml)) and the new UNESCO Strategy on TVET (2010-2015), the UNESCO-UNEVOC International Centre acts as a key component of UNESCO's international programme on technical and vocational education and training. It also works to support UNESCO's mandate for Education for All and Education for Sustainable Development. The Centre achieves this through taking action to strengthen and upgrade the worldwide UNEVOC Network (Flagship Programme), with particular reference to: stimulating international and regional cooperation concerning human resource development, promoting best and innovative practices in TVET, e.g. through the commissioning of Case Studies from within the UNEVOC Network, promoting UNESCO normative instruments and standards, knowledge sharing and clearinghouse activities, mobilizing expertise and resources and strengthening partnerships with other relevant agencies.

In this regard, the UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training, in partnership with the Chinese National Commission for UNESCO, organised an International Expert Meeting in Hangzhou, China, under the theme of education and training for the changing world of work. The aim of the International Expert Meeting was to explore the implications of the changing demands of the workplace on technical and vocational education and training with particular reference to the following three key aspects:

1. TVET Curricula Development and Delivery
2. Research and Innovation on School to Work Transition
3. Recognition, Certification, Accreditation and Quality Assurance in TVET Teacher Education

The intention of the Expert Meeting was to lead to the exchange of experiences in responding to such issues in order to identify lessons of leading practices, catalyze networks, and make plans for enhancing the contributions of TVET to the changing world of work in the Asia-Pacific Region, specifically, China, the Republic of Korea, Vietnam, Nepal and Lao PDR.

The meeting provided opportunities for participants to identify drivers of change in the workplace and the implication of these for policy and innovative practice in TVET.

The scope of the Expert Meeting on education and training for the changing world of work was formulated to clarify the implications of such issues for TVET. The sharing of experiences in responding to these issues allowed participants to identify lessons of leading practice, catalyze networks, and make plans for enhancing the contributions of TVET to the changing world of work.

The Expert Meeting was organized jointly by UNESCO-UNEVOC and the Chinese National Commission for UNESCO, and supported by the UNEVOC Centre at Zhejiang Technology Institute of Economy (ZJTIE), the Zhejiang Materials Industry Group Corporation, Hangzhou, China, and UNESCO Hanoi.



## II. PARTICIPANTS

The International Expert Meeting was designed for TVET experts and educators working in the areas of national TVET policy and planning, teacher education, curriculum planning and development. Twenty-nine (29) TVET experts from China, Vietnam, the Philippines, the Republic of Korea, Hong Kong, Germany, as well as from UNEVOC Centres in Vietnam, Thailand and Lao PDR attended. Among them, senior authors of the UNESCO-UNEVOC International Handbook of Education for the Changing World of Work and the Handbook of TVET Research, who are expert in the three themes related to the programme's issues, were selected as keynotes to debate on the educational challenges of the 21st century, presenting fresh ideas, methodologies and strategies which can lead to facilitating the formulation and preparation of comprehensive national TVET plans aligned with the demands of the industry (please see Appendix A: List of participants).

## III. ADMINISTRATIVE ARRANGEMENTS

The responsibility for organizing the meeting was divided between the UNESCO-UNEVOC International Centre and the Chinese National Commission for UNESCO. The UNESCO-UNEVOC International Centre provided funding for airfares, accommodation, and living expenses to all the invited participants. The daily subsistence rate was calculated at the prevailing UN rate for Hangzhou, China. Also, the UNESCO-UNEVOC International Centre jointly with the Chinese National Commission for UNESCO handled the overall selection of the participants. On the basis of the selections made, the Chinese National Commission for UNESCO, assisted by the UNEVOC Centre team at the Zhejiang Technology Institute of Economy, made travel and local arrangements to hold the meeting. Also, local organizers were responsible for secretarial services, logistical arrangements (including travel bookings, local ground transport, and air tickets for the participants), as well as questions of venue, accommodation, computers with Power Point, Power Point projector, flip charts and stationery.

## IV. ORGANIZATION OF THE MEETING

### 1. Opening Ceremony

The Opening Ceremony was chaired by Mr. Chen Lineng, President of the Zhejiang Technology Institute of Economy, Hangzhou. He introduced Ms Naing Yee Mar who addressed an opening speech in which she welcomed participants on behalf of UNESCO-UNEVOC, and outlined the background, objectives, expected outcomes and programme of the meeting. Ms Mar expressed that there is now a growing awareness that, in situations of scarce resources, the efficiency and effectiveness of TVET is of paramount importance and therefore, it is essential to assist TVET systems to ensure that good quality opportunities for acquiring skills for the world of work are made available for youth and adults.

Ms Dong Jianhong, Director, Division of Education, Chinese National Commission for UNESCO, also presented an Opening Address in which she welcomed participants, especially from UNEVOC Centres who came to China. Ms Dong expressed that the topic of the meeting was very important, especially during the global financial crisis, and therefore it presents a chance for researchers and teachers to realize the current situation and supply education and training to the focused groups. She also outlined the range of challenges faced by China and the ways in which all of these require a rapid and effective response from TVET.



Mr Chen Lei from the Educational Department of Zhejiang Province, China, further addressed the participants on behalf of the Zhejiang Municipal Government and put forward the wish that the conference address such important topics as (i) how to adapt TVET to economic development, and (ii) how to cultivate students' professional skills. He expressed that the topic of the meeting was a key issue in the Zhejiang Province as well as in China.

As local co-host, Mr Li Xi from the Zhejiang Materials Industry Group Corporation (ZJMI) in his opening address briefly introduced the ZJMI with regard to its cooperation system with the ZJITE, combining university and enterprise learning, as a successful partnership with an employment rate of 98 percent and above. He also presented the institution with regard to its endeavours to embrace sustainable development issues and welcomed the International Expert Meeting as a rare opportunity to study the topic of TVET for the business environment from its different aspects.

Finally, Mr Yu Busong, Chancellor of the Zhejiang Technology Institute of Economy (ZJTIE), welcomed all participants and briefly introduced the ZJTIE. He thanked the participants for their readiness to share international experiences, which will benefit the ZJTIE's teaching reform.

Within the frame of the Expert Meeting on Education for the Changing World of Work, two UNESCO-UNEVOC publications, the International Handbook of Education for the Changing World of Work, as well as the Handbook of Technical and Vocational Education and Training Research, were formally launched by the editors of the Handbooks, Rupert Maclean for the International Handbook and Felix Rauner for the Research Handbook, who participated in the meeting as keynote presenters on themes pertaining to these publications, with authors from the book present at the meeting. Both books were published this year by the publisher Springer Science and Business Media, and they are a flagship component of UNESCO-UNEVOC's International Library of Technical and Vocational Education and Training. UNESCO-UNEVOC's Head of Publications, Ms Alix Wurdak, chaired the launch.

## **2. Participants' presentations**

The programme involved keynote lectures, panel presentations, country reports, and group discussions. Each keynote speaker prepared a presentation under one of the three different thematic areas and then chaired the sessions of shorter presentations under their theme, which were held by the representatives of the different institutions. Every representative had twenty minutes time to exchange views on innovations and best practices which are responsive to the current needs, demands and job requirements. In addition, three UNEVOC Centres from Laos, Vietnam and Thailand were requested to present the activities of their UNEVOC Centres in relation to the themes under which they delivered their presentation. A copy of these presentations was provided on a CD and distributed among the participants. All presentations were followed by Q&A sessions.

### **Theme 1:**

#### **TVET Curricula Development and Delivery**

Keynote address by Prof. Felix Rauner, TVET Research Group, Bremen University, Germany: **Work-Process Knowledge as a Dimension of Curriculum Design**



In the morning session of the first day, 7 December, the keynote presentation by Prof. Felix Rauner on **Work-Process Knowledge as a Dimension of Curriculum Design** carved out different models of curriculum design which are composed of one or several thresholds between school, transition and work periods; the model of China being a hybrid version of 'mixed dualism'.

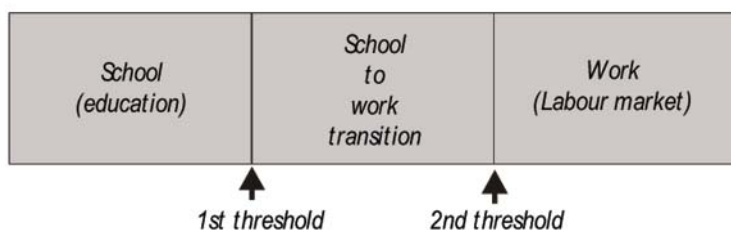


Fig. 1: Thresholds in the transition from school to work

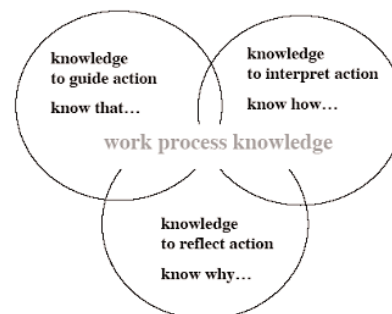
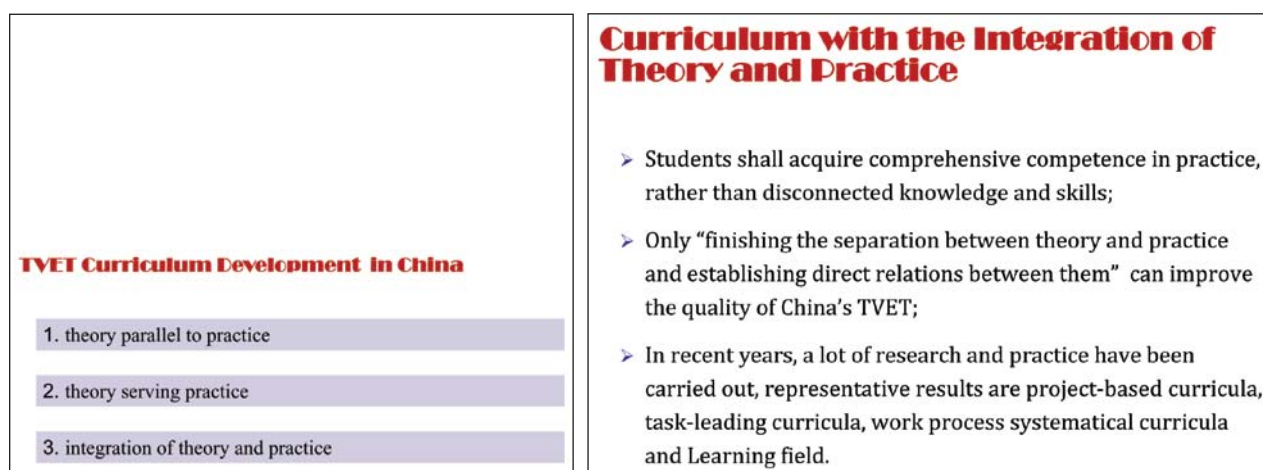


Fig. 11: Work process knowledge

Within the concept of work-process knowledge, the "Know that", "Know how" and "Know why" need to be considered, the ability to reflect acquired knowledge ("Know why") being the most important of all in TVET. With regard to the transition from beginner to expert, he identified the need for subject-oriented competence development for the foundation of a solid TVET system, i.e. to create curricula in terms of skills acquisition for occupations as opposed to modules, as competence grows with the importance of assigned tasks. The aim of TVET is therefore twofold: to teach skills, and to instill commitment. This cannot be achieved by means of control, power and fear. A good worker can commit to his occupation only if he feels responsibility for his job. Occupational identity and pride can be instilled by thinking in terms of occupations, not of modules (professionalization versus modularization of TVET).

### Presentations

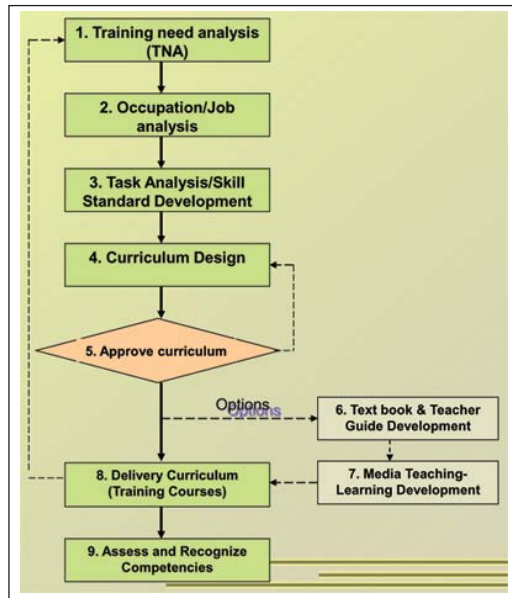
Mr Zhiqun Zhao from the Institute of Vocational and Adult Education, Beijing Normal University, China, held a presentation on **TVET Curricula Development in China – A Review from the Aspect of the Relationship between Theory and Practice**, highlighting the issue of discrepancy between theory and practice in TVET delivery in China and the need to integrate one into the other, using models for curriculum design which offer a comprehensive approach to TVET delivery. This model of an "Integrated Curriculum" would cater to the demands of the business sector while at the same time presenting the novice with learning tools to truly become a professional.



Models of TVET curricula

Model 3: integration of theory and practice Models of TVET curricula





Procedures for curriculum development in Vietnam

Mr Nguyen Dang Tru from the Vietnam Institute of Educational Science presented different - traditional, modern and hybrid - paradigms of TVET Curriculum Development and Delivery in Vietnam and analyzed these with regard to a specific set of questions to assess the relevance of a course at its development stage. In this context, he explained the different steps to be undertaken from needs, job and task analysis to the development of curricula, textbooks and certificates.

Ms Somphalang Gonphetsy from the Vocational Education Development Center, Vientiane, Lao PDR, which is a UNEVOC Centre, presented an analysis of the responsibilities of the Vocational Teacher Training Center at the Vocational Education Development Center (VEDC) in Laos. The tasks of the Centre include: developing curricula, textbooks, and media tools for TVET schools in the public as well as the private sector, conducting seminars, workshops and long-term vocational teacher training at the Higher Diploma Level, as well as providing research analysis on TVET.

Pre-Condition	Duration	Certificate Level
Lower Secondary	3 - 6 Months	Certificate 1
Lower Secondary	1 y ( 8+1 )	Certificate 2
Lower Secondary	2 y ( 8+2 )	Certificate 3
Lower Secondary	3 y ( 8+2 )	Certificate 4
Upper Secondary	1 y ( 11+ 1)	Diploma 1
Upper Secondary	2 y ( 11+2 )	Diploma 2
Upper Secondary	2 y ( 11+3 )	Diploma 3

TVET Qualifications in Laos

## Theme 2:

### Research and Innovation on School to Work Transition

Keynote address by Prof Rupert Maclean, The Hong Kong Institute of Education (HKIEd), Hong Kong, China: Education for the Changing World of Work

During the afternoon session of the 1st conference day, in his keynote presentation on Education for the Changing World of Work, Prof. Rupert Maclean of the Hong Kong UNEVOC Centre, the HKIEd, stressed the importance of literacy as an empowering tool; however, he identified TVET as being the crucial element to reduce illiteracy and poverty, and, ultimately, to reduce conflict. As an example, despite rapid economic developments in parts of Asia there is a need to keep in mind that the region is conflict-ridden with several ongoing hostile

Skills Development for Employability: Greater Flexibility Necessary
<ul style="list-style-type: none"> <li>Education/training for <b>employability</b>, rather than <b>employment</b></li> <li>Employers want <b>trainable</b> recruits, rather than <b>trained</b> recruits</li> <li>Greater emphasis on <b>learning</b>, rather than on <b>teaching</b></li> <li>Greater emphasis on <b>education</b> rather than <b>training</b></li> <li>Skills development for <b>citizenship</b>, as well as <b>employability</b></li> </ul>

Skills development for employability





situations, these often being due to inequity on the financial and societal level. TVET, by empowering people to take up sustainable livelihoods, can reduce this. Images such as that of electricity consumption at night are simple factors that reveal development and productivity, but also the areas where there is a lack of sustainability. This image also reveals that the commonly used categories "developing" or "transition" country need to be reassessed.

He continued that in some countries, however, people would rather go unemployed than have a technical job due to the stigma pertaining to this type of activity. In these countries, welders earn more than lawyers. With a more intellectual and flexible approach to TVET (preparation of "knowledge workers"), the gap between white- and blue-collar work can be reduced.

### Presentations

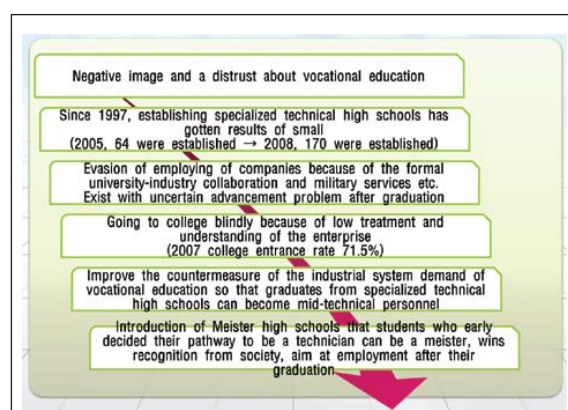
Mr Zheng Jian on behalf of Prof. Liu Yufeng from the Central Institute for Vocational and Technical Education of Ministry of Education, P. R. China, presented an **Analysis on the Structure of Teaching Staff within Secondary Vocational Education in China**.

	博士 Doctor	硕士 postgraduate	本科 Undergraduate	专科 College graduate	高中及以下 High school and below
2004	227	7076	387649	159854	16231
2005	222	9030	413692	151044	14706
2006	240	11628	450079	145759	14234
2007	284	14861	486767	139585	13103

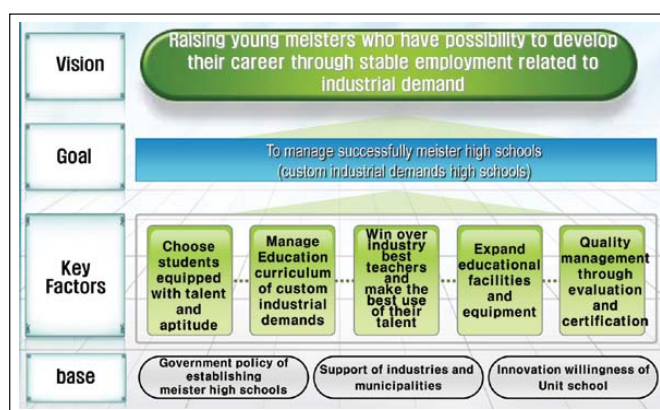
Educational background of teachers in secondary TVET in China

He discussed the difficulty of providing quality TVET as TVET teachers graduating from Higher Education institutions have no experience in the field and lack the technical background. It is therefore suggested to establish a scientific standards system for TVET teachers and to implement a mobility mechanism which would enable teachers to gain on-the-job experience in the industry as well as employing staff from the industry to take up part-time teaching tasks.

Prof. RHO Taecheon from Chungnam National University, Daejeon, Republic of Korea, reflected on **The Issues and Strategies Regarding Meister High Schools (MHS) in Korea**. This scheme was established with an aim to dynamise TVET institutions and make them more attractive by encouraging international exchange and work placements in industry settings against the background of changing social, family and industry structures and rapid advances in the technology sector.



Background



Development System of Meister High Schools



### Theme 3:

#### Recognition, Certification, Accreditation and Quality Assurance in TVET Teacher Education

Keynote address by Prof. Huang Chunlin, Office of Institutional Research and International Affairs (OIRIA) at the ZJITE, Hangzhou, China: **The Curriculum Reform on TVET for Sustainable Development in China: New Vision towards the Demands of the New Economy**

In the absence of Prof. Majumdar, who joined the conference on the 3rd day, Thematic Area 3 was shifted to the 3rd day; therefore, Prof. Huang Chunlin (Chandler) of the Hangzhou UNEVOC Centre, the ZJITE, held a keynote presentation on **The Curriculum Reform on TVET for Sustainable Development in China: New Vision towards the Demands of the New Economy**. In his presentation, he reflected on sustainability issues particularly relevant to the case of the Chinese economy: pollution, unsustainable production, economic migration (urbanization) and cultural diversity. Within the frame of this theme, he presented an action-research-based project in teaching and learning on "Developing Approaches in Education for Sustainable Development in TVET in China". This project was endorsed by UNESCO-UNEVOC and conducted jointly with Griffith University, Australia, and eleven TVET colleges in China, encompassing 30 majors, 45 courses and 80 teachers in 8 provinces. It was initiated in 2007, the first phase coming to a close at the end of 2009.

Environment ↑	<b>Green, but not decent</b> Examples: > Electronics recycling without adequate occupational safety > Low-wage installers of solar panels > Exploited biofuels plantation days laborers	<b>Green and decent</b> Examples: > Unionized wind and solar power jobs > Green architects > Well-paid public transit employees
	<b>Neither green nor decent</b> Examples: > Coal mining with adequate safety > Women workers in the cut flower industry in Africa and in Latin America > Hog slaughterhouse workers	<b>Decent, but not green</b> Examples: > Unionized car manufacturing workers > Chemical engineers > Airline pilots
	→ <b>Decent work</b>	

Decent and green jobs

### Presentations

The keynote was followed by a presentation on **Employment Difficulty for Chinese College Graduates: Factors and Solutions within Education**, by Prof. Shi Weiping from East China Normal University, Shanghai, China. With a shift from elite to mass higher education in the 2000s, an increasing number of qualified workers need to be absorbed by the labour market in China. However, with a tendency of HE schools to offer low-investment courses which are more on the academic side, the graduates lack practical TVET skills and have difficulties entering the job market.



■ <b>Employment Rate by Year</b>				
Year	Graduates	Employed	Rate %	Unemployed No.
1998	820,000	76		196,000
1999	840,000	79		176,000
2000	940,000	82		169,000
2001	1,030,000	90		103,000
2002	1,330,000	80		266,000
2003	1,870,000	83		317,000
2004	2,390,000	73		645,000
2005	3,380,000	72		946,400
2006	4,130,000	70		1,239,000
2007	4,477,907	70		1,343,000
2008	5,590,000	70		1,677,000
2009	6,110,000	74		1,588,000
2010	7,000,000 (estimated)	75% (if)		1,750,000

Current employment situation for Chinese college graduates

■ National Universities	84.8%
■ Regional Univ./Colleges	70.9%
■ Local 2/3-Year Colleges	58.9% (2005)
	70.0% (now)

Employment rate by college type

Keynote address by Prof. Dr. Shyamal Majumdar, Colombo Plan Staff College, Manila, Philippines:  
**New Paradigm for TVET Educators**

In the morning session of the 3rd day, 9 December, Prof. Shyamal Majumdar of the Colombo Plan Staff College, which is a key partner of the UNESCO-UNEVOC International Centre, held a keynote presentation on

**New Paradigm for TVET Teacher Education** in the information age. He identified climate change, ICT and the knowledge society to be major drivers of change, and reflected on how TVET teachers can rapidly tackle these changes to be able to integrate new technologies (bio, nano, embedded, energy, space and mechatronic) into their teaching. Therefore, it is as important to transfer content – which fast becomes obsolete – as it is to teach generic, HOT (higher order thinking) skills: the ability to adapt and to rapidly learn new skills, in order to be able to assimilate and teach students in technologies that are not yet invented.

“A teacher can never teach unless he is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame”

Rabindranath Tagore

■ <b>Implication of Global Trends in TVET</b>	
• <b>Knowledge Based Economy</b>	– <b>HOT and Generic Skills</b>
• <b>Climatic Change</b>	– <b>Education for Sustainable Development</b>
• <b>Information &amp; Communication Era</b>	– <b>Integrating ICT in Teaching &amp; Learning</b>

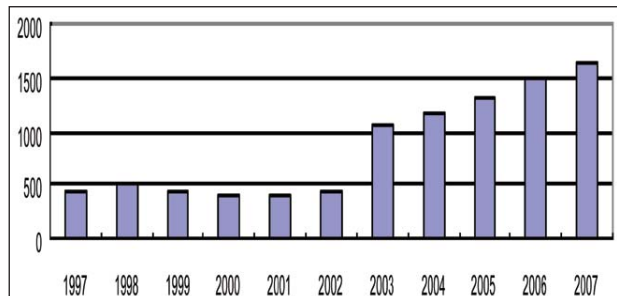
Implication of global trends in TVET

He stressed that, TVET being the highest producer and consumer of resources, it has a great role to play in advancing sustainable development (SD). As part of this, TVET teachers should be agents of change, who integrate these values into their teaching. As such, SD should be part of the curriculum. He also presented a regional accreditation system established by CPSC as least-developed countries are the largest suppliers of workforce in the region covered by CPSC but there is currently no backup of quality assurance as each Government has its own accreditation system.

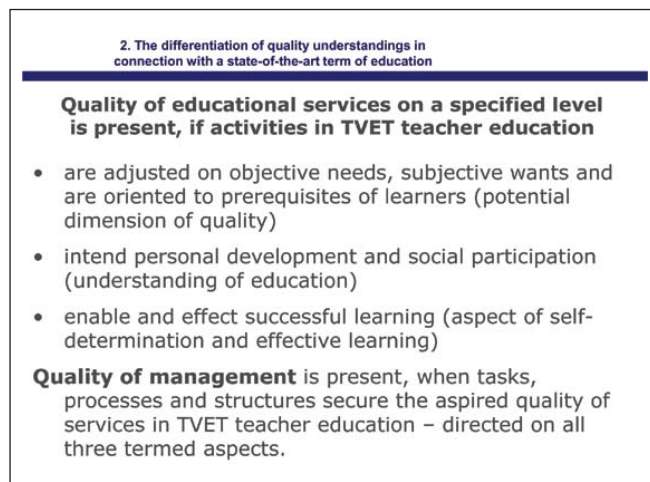
## Presentations

Prof. Zhang Jianrong, of the Institute of Vocational Instructors at Tongji University, Shanghai, China, held a presentation on **Professional Education and Step-By-Step Training for TVET Teachers**. He argued for a two-

step TVET teacher training system in which TVET graduates, in a first instance, receive University education up to Bachelors' level while at the same time gaining practical experience through internships, and, in a second step, qualify in vocational schools as TVET teachers in their respective subject. He also presented a Regional Cooperation Platform for TVET Teacher education for joint research and mutual consultation, which includes institutions from Germany, China, Laos and Vietnam.

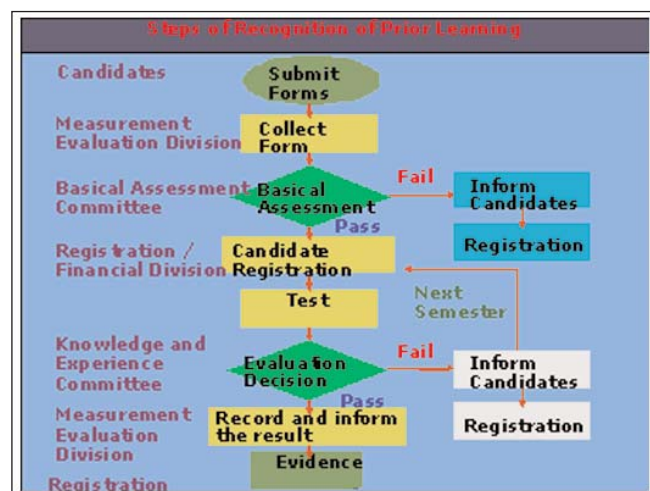


Total students enrolled in TVET schools in China (in 10,000)



Quality assurance and development in TVET teacher education in Vietnam

Assoc. Prof. Dr. Nguyen Khang of the Department of Technical and Vocational Education at the Ministry of Education and Training in Hanoi, Vietnam, which is a member of the UNEVOC Network, held a presentation on the issue of **Quality Assurance and Development in TVET Teacher Education** in Vietnam with regard to political and structural preconditions to ensure the continuous quality delivery of TVET teacher training, as well as with regard to different understandings of quality in TVET teacher education. He presented different quality dimensions in terms of their input-, process- and output-oriented approach to quality TVET teacher training.



Steps to recognition of prior learning – Thailand

Prof. Surasak Srinoi from the Office of Vocational Education Commission (OVEC) in Bangkok, Thailand, which is a UNEVOC Centre, presented the structure of the TVET system in Thailand with particular focus on how the Vocational Education Commission embeds **Recognition of Prior Learning** into its TVET planning and delivery through credit transfer mechanisms that recognize formal, work and life skills through assessment by interview, questioning referees, an observation among others towards the obtention of the Vocational and the Higher Vocational Certificate.





### 3. Field visit

On the afternoon of 8th December, a visit to ZJTIE campus (a UNEVOC Centre) was arranged, where a seminar was organized with 29 TVET experts including the leaders and staff of ZJTIE. During the seminar, Mr. Chen Lineng, President of ZJTIE, introduced the Provincial Demonstrative TVET College Construction Project that ZJTIE is implementing. Some of the IEM participants first made productive comments on this project, and then delivered their schooling or educational practices and ideas on TVET, especially in the field of curriculum development and capacity building of teachers. After that, the participants visited ZJTIE's on-campus practice and internship facilities.



### 4. Networking and Dissemination of Best Practices

To serve the meeting's aim to enhance the exchange among UNEVOC Network Members, Ms Naing Yee Mar conducted a discussion on **Ensuring the Right to TVET for All through UNESCO-UNEVOC Knowledge Sharing and Building Programmes**. Ms Mar presented the work of UNESCO-UNEVOC in terms of its aims to meet the Education for All (EFA) Goals, to achieve TVET for Education for Sustainable Development (ESD) and to promote international collaboration and innovation, and highlighted the role of the UNEVOC Network in the achievement of these goals.

Ms Alix Wurdak then presented the role of UNEVOC in **Networking and Disseminating Best Practices**, as defined by UNESCO's Strategy for TVET for 2010-2011, which defines the UNESCO-UNEVOC International Centre as being, within UNESCO, a clearinghouse and coordinator of the global TVET debate, in order to:

Act as a clearinghouse and inform the global TVET debate, serving as a clearinghouse for TVET and a source of information-sharing and cooperation using revamped global UNEVOC networks, enabling decision makers undertaking policy reviews to weigh up the advantages and disadvantages of different models facilitating the cooperation between countries faced with similar challenges. (<http://www.unesco.org/en/tvet/strategy/core-area3/>).

Therefore, the meeting should provide a stimulus and a platform for south-south and north-south-south collaboration and exchange, where published outcomes are a vehicle to transport findings and examples of best practice to other Centres and to share experiences.



## 5. Official Closing of the Seminar

The closing ceremony was set up in the afternoon of 9 December 2009. The session was chaired by Ms Naing Yee Mar, and on behalf of UNESCO-UNEVOC she expressed her sincere thanks to all participants as well as partner agencies and local organizers for their valuable contribution to the success of the meeting.

Mr. Chen Lineng, President of the Zhejiang Technology Institute of Economy, Hangzhou, stated that the achievements shared by the institutions present at this meeting could help benefit the TVET structures in their respective countries, as well as internationally. He stated that these achievements had been well received at ZJITE, and that the outcomes of this meeting would greatly improve its campus and institute. His respect and thanks go to all participants and all are cordially invited to visit again in Hangzhou. He iterated a proposal to co-host further meetings and appointments at the ZJTIE and looks forward to further cooperation.

Secondly, Mr Du Yue, Deputy Secretary-General of the National Commission to UNESCO expressed the sincere thanks to all participants for their dynamic participation, competence and hard work in sharing information. He also expressed his sincere thanks and high appreciation to UNESCO-UNEVOC, Bonn, for the fruitful contribution to develop the Network between and the work of the UNEVOC Centres.





The three-day seminar would not have been successful without the valuable contribution from the Zhejiang Technology Institute of Economy, Hangzhou, China. The Institute provided a very warm welcome to the participants and served as a platform for this truly international encounter.

Finally, UNESCO Hanoi was also thanked for their valuable contribution in providing sponsorship to the participants from Vietnam.

## V. MEETING COORDINATORS' SUMMARY

The meeting explored ways in which skills development concepts that cater for the needs of the changing world of work can be integrated into TVET as well as into capacity-building programmes and, through them, into national TVET systems, particularly in the Asia-Pacific Region. The different approaches with regard to the relationship between TVET and the business environment were discussed, focusing on three main aspects:

1. TVET Curricula Development and Delivery
2. Research and Innovation on School-to-Work Transition
3. Recognition, Certification, Accreditation and Quality Assurance in TVET Teacher Education

These topics led the participants to discuss the strengths and weaknesses of existing programmes offered by TVET institutions in their respective countries and to analyse the way forward in cooperation with industries. Discussions on the trends and programmes facilitated the formulation of strategies to upgrade TVET programmes.

In light of these chosen themes, the participants identified the possibilities and key factors to create quality TVET and discussions focused on what can be done to build the foundations for solid TVET development and delivery. The following key issues were raised:

- > Enhancing the effectiveness of TVET in a global economy;
- > Ensuring the link between academic learning and the practice of TVET and of industry in a multidisciplinary manner;
- > Implementing higher-level TVET teacher education at the university level;
- > Initiating and supporting the establishment of TVET-oriented research and development capacities and their integration into national systems of innovation;
- > Fostering cooperation between universities, teacher-training institutions, TVET institutions and industries and other communities;
- > Designing a unified system of qualifications offered on a national basis;
- > Supporting the development and maintenance of networks and partnerships to facilitate international knowledge exchange.

The sharing of experiences in responding to such issues were used to identify lessons of leading practice, catalyze networks, and make plans for the enhancing the contributions of TVET to the changing world of work. The following are the specific recommendations of the International Expert Meeting in order to strengthen the links between the private business sector and technical and vocational education and training institutions:



- > To share the successful TVET experiences for the changing world of work from different parts of the world through specific portals and electronic networks, other resource materials and regional conferences and symposia;
- > To introduce and distribute more useful and practical resource materials for teaching and assessment, e.g. developing guidelines and standards tools on measurement of quality standard in TVET;
- > To conduct research and other innovations in the country to be relevant to changing situations;
- > Sharing of knowledge, best practice and some examples of the ways in which the skill needs are being met by TVET in the countries.

The meeting contributed to the following outcomes:

- > Increased understanding of the important role of TVET in supporting productivity, social development, citizenship and sustainable development, and the opportunities and responsibilities of governments, businesses, associations, educational institutions and civic society organizations in supporting the enhancement of TVET;
- > A set of lessons of leading practice distilled from the analysis of shared experiences;
- > Increased awareness of the UNEVOC Network and Centres as resources for supporting the enhancement of TVET;
- > Enhanced partnership and cooperation between different partners working in the field of TVET;
- > Strengthened national capacity to formulate policies that promote equitable access of youth and adults to the world of work.

In conclusion, the meeting provided a platform for the discussion and exchange of ideas aiming for a broadening of TVET from the narrow task of providing training for industry- and occupation-specific skills to the broader task of workforce development and lifelong learning for sustainable development and citizenship.

Overall, the various interventions which included keynotes, country paper presentations, thematic focused discussions, study visits and socio-cultural programmes have contributed to the overall success of the meeting.

## VI. FOLLOW UP

The outcomes of the International Expert Meeting will be made available to other TVET experts by way of publishing the Meeting Report and participants' presentations through UNEVOC online services.

As a follow up to the International Expert Meeting, UNESCO-UNEVOC will explore ways of enhancing collaboration with agencies and representatives of the business environment in order to improve the quality of TVET delivery for the changing world of work.

## VII. APPENDIXES

- A. List of participants
- B. Programme outline



Name	Institution	Email	Address	Tel	Fax
Mr Du Yue	Deputy Secretary General, Chinese National Commission for UNESCO	dy@moe.edu.cn	No.37 Damucang Hutong, Xidan, Beijing, 100816, China		
Mr Zhang Jianrong	Director, Tongji University	zhangjr@tongji.edu.cn	Room 1108, Zhongde Building, 1239 Siping Road, Shanghai, 200092, China		
Mr Zhao Zhiqun	Director, Research Institute of Vocational & Technical Education, Beijing Normal University	zhiquanzhao@263.net	19 Xijiekou Wai Street, Beijing 100875, China	+86 135 012 931 72	+86 10 588 092 32
Prof. Shi Weiping	Director, Research Institute of Vocational and Adult Education, East China Normal University	wpshi@ses.ecnu.edu.cn	3663 Zhongshan Bei Road, Shanghai, 200062, China	+86 20 622 326 30	+86 20 622 326 30
Prof. Felix Rauner	TVET Research Group (i:BB), University of Bremen	felix.rauner@uni-bremen.de	FB1, Leobener Str./NW 2, 28359 Bremen, Germany	+49 421 218 463 4	
Prof. Nguyien Khang	Deputy Director General, Department of Technical and Vocational Education, Ministry of Education and Training	nkhang@moet.edu.vn	49 Daicoviet, Hanoi, Vietnam	04 386 848 63 09 042 517 40	04 386 949 95
Mr Nguyen Dang Tru	TVET Curriculum Specialist, Vietnam Institute of Educational Science	trunied@gmail.com	106 Tran Hung Dao Str., Hanoi, Vietnam	+84 43 868 486 3 +84 90 425 174 5	+84 438 694 995
Prof. Rupert Maclean	The Hong Kong Institute of Education	maclean@ied.edu.hk	10, Lo Ping Road, Tai Po, New Territories, Hong Kong	+852 294 864 55	+852 294 887 75
Mr Shyamal Majumdar	Director General, Colombo Plan Staff College for Technician Education	dr_majumdar@cpsctech.org	Building Block C, DepEd Complex, Meralco Avenue, Pasig City 1600 Metro Manila, Philippines	+63-920 903 278 5	



<b>Ms Naing Yee Mar</b>	Programme Officer, UNESCO- UNEVOC	ny.mar@unesco.org	UN Campus, Hermann- Ehlers-Str. 10, 53113 Bonn, Germany	+49 228 815 010 6	+49 228 815 019 9
<b>Ms Alix Wurdak</b>	Head of Publications, UNESCO- UNEVOC	a.wurdak@unesco.org	UN Campus, Hermann- Ehlers-Str. 10, 53113 Bonn, Germany	+49 228 815 010 8	+49 228 815 019 9
<b>Ms Somphalang Ngonphets</b>	Head, Curriculum Development Unit, Vocational Education Development Centre	vedc@hotmail.com	Lao - Thai Road, Ban Wat Nak, Sisattanak District, P.O. Box 1639, Vientiane Capital City, Lao PDR	+856 21 350 497	+856 21 312 422 +856 21 312 421
<b>Dr. Devi Prasad Ghimire</b>	Council for Technical Education and Vocational Training (CTEVT)	admin@ctevt.wlink.com.np	P.O. Box 3546, Kathmandu, Nepal		
<b>Mr Surasak Srinoi</b>	Director, Wangklaingwon Industrial and Community Education College	surasak_ssn@hotmail.com	3/63 Liabwang Rd. Hua Hin Drachuapkirinkhan 77110, Thailand	0 3252 0500 08 142 2159 6	0 323 204 81
<b>Mr Zheng Jian</b>	Division of International Cooperation and Comparative Education Research, Central Institute for TVET	zhengjian309@163.com	18 Levels, Fusheng Building, No. 4, Huixin Dongjie, Chaoyang District, 100029 Beijing, China	150 102 874 32	+86 010 585 567 20
<b>Mr Zhou Zhenwu</b>	Director, Training Center for Teachers of Vocational Education of Shanghai Second Polytechnic University	zhouzhenwu@163.com	2360 Jinhai Rd, Pudong, Shanghai 201209, China	+86 21 625 802 74	+86 21 625 899 78
<b>Ms Dong Jianhong</b>	Director, Division of Education, Chinese National Commission for UNESCO	jhd@moe.edu.cn	No.37 Damucang Hutong, Xidan, Beijing, 100816, China	+86 139 100 792 02	
<b>Prof. RHO, Tae Tae- Cheon</b>	Director, Technology Education Dept., College of Education, Chungnam National University	trcho@cnu.ac.kr	220 Gung-dong, Yuseong-gu, Daejeon- city, 305-764, Republic of Korea	+82 42 821 569 1	+82 42 821 569 6 +82 42 825 355 6
<b>Dr. Yang Lin</b>	Beijing Normal University	yanglin2006@yahoo.cn	Beijing Normal University, 19 Xijiekou Wai Street, Beijing 100875, China	+86 135 816 238 48	



<b>Prof. Wu Yun</b>	Huzhou Vocational and Technical Colleg	ada_ada007@hotmail.com	No.299, XueFu Road, Modern Teaching District Huzhou, Zhejiang, 313000, China	+86 135 112 0881 4	+86 572 236 335 6
<b>Mr Chen Lei</b>	Deputy Director, Higher Education Division, Department of Education of Zhejiang Province	chenl318@126.com	321 Wenhui Road, Hangzhou, Zhejiang, 310014, China	+86 571 880 089 75	+86 571 880 087 65
<b>Mr Li Xi</b>	Manager, Personnel Department, Zhejiang Materials Industry Group Corporation	lx@zjmi.com	9th Floor, 78 Fengqi Road, Hangzhou, Zhejiang, 310003, China	+86 571 870 545 09	+86 571 870 545 09
<b>Mr Yu Busong</b>	Chancellor, Office of International Affairs, Zhejiang Technology Institute of Economy	ybs@zjtjie.edu.cn	66 Xuezheng Str. Xiasha University Town, Hangzhou, Zhejiang, 310018, China	+86 571 869 282 66	+86 571 869 280 05
<b>Mr Chen Lineng</b>	President, Office of International Affairs, Zhejiang Technology Institute of Economy	cln@zjtjie.edu.cn	66 Xuezheng Str. Xiasha University Town, Hangzhou, Zhejiang, 310018, China	+86 571 869 280 00 +86 571 869 280 00	+86 571 869 280 05
<b>Mr Huang Chunlin</b>	Dean, Office of Institutional Research and International Affairs, Zhejiang Technology Institute of Economy	chandlerh@126.com	66 Xuezheng Str. Xiasha University Town, Hangzhou, Zhejiang, 310018, China	+86 571 869 282 05	+86 571 869 282 05
<b>Prof. James Shan</b>	Deputy Director, Office of International Affairs, Zhejiang Technology Institute of Economy	swwwsb@126.com	66 Xuezheng Str. Xiasha University Town, Hangzhou, Zhejiang, 310019, China	+86 571 869 282 06	+86 571 869 282 06
<b>Dr. Hartely Li</b>	Office of Institutional Research, Zhejiang Technology Institute of Economy	lxyhartley@163.com	66 Xuezheng Str. Xiasha University Town, Hangzhou, Zhejiang, 310019, China	+86 571 869 282 93	+86 571 869 282 06
<b>Dr. Xie Yongliang</b>	Office of Institutional Research, Zhejiang Technology Institute of Economy	mickery01@yahoo.com.cn	66 Xuezheng Str. Xiasha University Town, Hangzhou, Zhejiang, 310019, China	+86 571 869 282 93	+86 571 869 282 06
<b>Mr Li Hang</b>	President's Office, Zhejiang Technology Institute of Economy	lh@zjtjie.edu.cn	Beijing Normal University, 19 Xijiekou Wai Street, Beijing 100875, China	+86 571 869 280 99	+86 571 869 280 05











# Program for EFA

## 国际教育与培训专家会议日程

Meeting room: Movie and teleplay hall 2<sup>nd</sup> floor

Monday, 7 December 2009		
08.30 09.00	–	<b>Registration 报到注册</b>
09.00 10.15  (7minutes per speaker)	–	<ul style="list-style-type: none"> <li>● UNESCO-UNEVOC 联合国教科文组织国际职教中心</li> <li>● UNESCO National Commission 联合国教科文组织全国委员会</li> <li>● Educational Department of Zhejiang Province 浙江省教育厅</li> <li>● Zhejiang Materials Industrial Group 浙江物产集团</li> <li>● Zhejiang Technology Institute of Economy 浙江经济职业技术学院</li> </ul> <p>Outline of the meeting and outcome mapping (Education and training for the Changing world of work: meeting the demands from business environment) 会议纲要和预期结果 (面向变化中的工作领域: 适应企业经营环境需要)</p> <p>Official launch of the two UNESCO-UNEVOC International Handbooks (15 minutes) 联合国教科文组织国际职教中心国际手册发行仪式 (15 分钟)</p>
10.15 10.30	–	<b>Morning Refreshment Break</b>
10.30 11.15	–	<p><b>Chairperson Prof. R. Maclean ( Hong Kong Institute of Education )</b> <b>鲁帕特.麦克林教授主持 ( 香港教育学院 )</b> <b>Keynote Address 主题演讲</b></p> <p><i>Theme 1: TVET curricula development and delivery</i> 主题 1 :职 教课程发展与教学</p> <p>– Prof. F. Rauner - “Work process knowledge as a dimension of curriculum design” 工作过程导向 : 课程设计的一个维度 , 菲利克斯.劳奈尔教授</p> <p><i>followed by a Q &amp; A Session (15 minutes)</i> 发言结束后问答环节 ( 15 分钟 )</p>
11.15 12.45  (20 minutes)	–	<p><b>Chairperson Prof. F. Rauner</b> <b>菲利克斯.劳耐尔教授主持</b> <b>Presentations on Theme 1: “TVET curricula development and delivery”;</b></p>



per presenter)	<p>主题 1：职教课程发展与教学</p> <ul style="list-style-type: none"> <li>- Prof. Zhao Zhiqun, Beijing Normal University 赵志群教授 (北京师范大学)</li> <li>- Mr Nguyen Dang Tru, Vietnam Institute of Educational Science 阮邓著先生 (越南教育科学研究院)</li> <li>- Ms Somphalang Gonphetsy, Vocational Education Development Center, Lao 苏姆琺琅. 琨菲彩教授 (老挝职教开发中心)</li> </ul> <p><i>followed by a Q &amp; A Session (10 minutes)</i> 发言结束后问答环节 (10 分钟)</p>
12.45 14.15	- Lunch
14.15 15.00	<p><b>Chairperson Prof. F. Rauner</b> <b>菲利克斯.劳耐尔教授主持</b> <b>Keynote Address 主题演讲</b> <i>Theme 2: Research and Innovation on School to Work Transition</i></p> <ul style="list-style-type: none"> <li>- Prof. R. Maclean - “TVET for the Changing world of work” 主题 2：“学校——工作”过渡中的研究和创新，麦克林教授：面向变化中的工作领域的职业技术教育与培训</li> </ul> <p><i>followed by a Q &amp; A Session (15 minutes)</i> 发言结束后问答环节 (15 分钟)</p>
15.00 16.30 (20 minutes per presenter)	<p><b>Chairperson Prof. R. Maclean</b> <b>鲁帕特.麦克林教授主持</b> <b>Presentations on Theme 2: “TVET for the Changing world of work”;</b> 关于主题 2 的报告：面向变化中的工作领域的职业技术教育与培训</p> <ul style="list-style-type: none"> <li>- Prof. Shi Weiping, East China Normal University 石伟平教授 (中国华东师大)</li> <li>- Prof. RHO, Tae-Cheon, Chungnam National University Korea 卢泰天教授 (韩国忠南大学)</li> </ul> <p><i>followed by a Q &amp; A Session (10 minutes)</i> 发言结束后问答环节 (10 分钟)</p>
18.00	Reception

Tuesday, 8 December 2009





09.00 – 10.15	<p><b>Chairperson : Ms Naing Yee Mar 楠.伊.玛 主持</b></p> <p><b>Keynote Address 主旨报告</b></p> <p><i>Presentation: Orienting Technical and Vocational Education and Training for the need of social and economic development in China. A brief introduction to the TVET and UNEVOC Centre in China</i></p> <p>面向中国社会经济发展需求的职业技术教育与培训：中国 TVET 和 UNEVOC 中心简介</p> <ul style="list-style-type: none"> <li>- Prof. Huang Chunlin, ZJTIE 黄春麟教授，中国浙江经济职业技术学院</li> </ul>
10.15 – 10.30	Morning Refreshment Break
10.30 – 12.00	<p><b>Chairperson Ms Naing Yee Mar 楠.伊.玛 主持</b></p> <p><b>Presentations on Theme 3: “Recognition, Certification, Accreditation and Quality Assurance in TVET teacher education”;</b> 主题 3：职教教师教育中的资格认可、认证和质量保障</p> <ul style="list-style-type: none"> <li>- Prof. Liu Yufeng, Central Institute for TVET 刘育峰教授，中国教育部职教中心研究所</li> <li>- Prof. Zhang Jianrong, Tongji University Shanghai 张建荣教授，中国上海同济大学</li> <li>- Prof. Dr. Nguyen Khang, MoET, Vietnam 阮康教授，越南教育部</li> <li>- Prof. Surasak Srinoi, UNEVOC Centre Thailand 苏拉萨克.斯里诺教授，泰国 UNEVOC 中心</li> </ul> <p><i>followed by a Q &amp; A Session (10 minutes)</i> 发言结束后问答环节（10 分钟）</p>
13.00 – 14.30	Lunch 午餐
14.30 - TBD	ZJTIE Visit 参观浙江经济职业技术学院

### Wednesday, 9 December 2009

09.00 – 10.15	<p><b>Chairperson Ms Naing Yee Mar 楠.伊.玛 主持</b></p> <p><b>Keynote Address</b></p>
---------------	---



	<p><i>Theme 3: Recognition, Certification, Accreditation and Quality Assurance in TVET teacher education</i></p> <p>主题 3：职教教师教育中的资格认可、认证和质量保障</p> <ul style="list-style-type: none"><li>- Prof. Dr. Shyamal Majumdar: “New Paradigm for TVET Educators” 职教师资教育的新范例</li></ul> <p><i>followed by a Q &amp; A Session (15 minutes)</i></p> <p>发言结束后问答环节 ( 15 分钟 )</p>
10.15-11.00	<p><b>Networking and Dissemination of Best Practices</b></p> <p>职教课程发展的整体分析和成果展示</p> <ul style="list-style-type: none"><li>- “Building TVET Communities and Networks through UNESCO-UNEVOC Online Services” – Ms N.Y. Mar 通过联合国教科文组织国际职教中心创建 TVET 社区与网络，<b>楠.伊.玛</b></li><li>-Networking and Dissemination of Best Practices - The Role of UNESCO-UNEVOC”, Ms A. Wurdak 职教课程发展的整体分析和成果展示 - 联合国教科文组织国际职教中心的职责，阿里克斯.沃尔达克女士</li></ul> <p><i>followed by a Q &amp; A Session (15 minutes)</i></p> <p>发言结束后问答环节 ( 15 分钟 )</p>
10.45 – 11.00	Morning Refreshment Break 茶歇
15.00 – 16.00	<p><b>Chairperson Ms Naing Yee Mar 楠.伊.玛 主持</b></p> <p><b>Official closing 闭幕式</b></p> <ul style="list-style-type: none"><li>- UNEVOC Network Representative (ZJTIE UNEVOC Centre) UNEVOC网络成员代表 ( 浙江经济职业技术学院 UNEVOC联系中心 )</li><li>- UNESCO-UNEVOC 联合国教科文组织国际职教中心</li><li>- UNESCO National Commission 中国联合国教科文全国委员会</li></ul>
12.00 – 14.00	Lunch 午餐





# 会务温馨提示

## Meeting Message

一、12月7-8日会场均在宾馆2楼影视厅，12月9日上午分组讨论地点（3组）分别为2楼影视厅、2楼行政会议室和4楼行政会议室。

二、根据会议日程，房间预订到12月9日晚（含），代表离会请于下午两点之前退房。

三、会议期间所有房间均含早餐（7-10日），早餐券入住时随房一起发放。除7日晚欢迎晚宴安排在梅地亚宾馆7楼好来屋厅（凭代表证）外，其他用餐均安排自助餐（就餐地点为梅地亚宾馆2楼西餐厅，凭餐券就餐，自助餐券在报到时发放）。

四、由会议主办方支付住宿费用的专家，资助范围只包括基本房费，不含迷你吧、洗衣服、长途电话等额外消费。

五、房间内提供免费上网，请将IP和DNS地址均设为自动获取。

六、须订购返程票的代表请到梅地亚宾馆商务中心订票，电话：8611（宾馆内线），定好票后请将返程信息及时告知会务组，以便安排送站车辆。

七、会议为相关代表提供穆斯林食品。

八、会务联系

会务组房间号：6308      6312

房间内线电话：6308      6312

联系人手机号码：

谢永良 132 9184 0838

李 杭 135 8810 1078

● All the panel meetings are in the Movie and Teleplay Hall (2<sup>nd</sup> floor). and the group discussion on the morning of Dec 9 (3 Groups) are arranged in the Movie and Teleplay Hall (2<sup>nd</sup> floor), the Executive Conference Room(2<sup>nd</sup> floor), and the Executive Conference Room (4<sup>th</sup> floor) respectively.

● According to the meeting schedule, all the hotel rooms will be reserved until the night of 9<sup>th</sup> Dec.(inclusive). Please check out before 2:00 pm when you depart.

● All the breakfasts during the meeting (7 Dec.-10 Dec.) are included in the room rate. The breakfast coupons are delivered with the room card when checking in. Except the Welcoming Dinner on 7<sup>th</sup> Dec. in Hao Lai Wu Hall on 7<sup>th</sup> Floor (admission by Participant Cert.), all the other meals during the conference are arranged in the Buffet Canteen on the 2<sup>nd</sup> Floor(admission by meal coupons).

● The participants' hotel costs paid by the organisers excludes minibar, laundry, long distance call and extras.

● Internet access is available free of charge. Please set the IP and DNS address into "automatically access".

● Ticket booking service for departure is offered by the Business Centre of Media Hotel. You can dial hotel extension"8611" for ticket reservation. Please inform the Secretariat after booking the return tickets so that we can arrange vehicles to send you off.

● Muslim foods are also available.

● **Organizer Secretariat Contacts:**

Secretariat Room: **6308 6312**

Hotel Extension: **6308 6312**

● **Contact Persons & Cell Phones:**

James Shan 139 6814 9568

Hartley Li 137 0671 7209

Ken Kang 137 5710 0981



# 会议宾馆信息

## Venue information

中国杭州梅地亚宾馆  
Media Hotel, Hangzhou, China

**地址:** 杭州庆春路 203 号 (长生路 18 号)

**Add:** 203 Qingchun Road (18 Changsheng Road), Hangzhou

**电话:** +86 571 8791 8888 **传真:** +86 571 8791 2333

**Tel:** +86 571 8791 8888 **Fax:** +86 571 8791 2333

