



**Shanghai Consensus: Recommendations of the  
Third International Congress on Technical and Vocational Education and Training  
'Transforming TVET: Building skills for work and life'  
Shanghai, People's Republic of China  
14 to 16 May 2012**

**Preamble**

We, the participants in the Third International Congress on Technical and Vocational Education and Training (TVET), met in Shanghai, People's Republic of China, from 14 to 16 May 2012, and reviewed the major trends and policy developments in TVET since the Second International Congress held in Seoul, Republic of Korea, in 1999. We discussed challenges faced by TVET systems and explored appropriate responses aimed at building a better understanding of the contribution of TVET to sustainable development and at defining strategic directions for cooperation among countries and with the international community to support TVET for all, within the framework of the overall efforts in favour of access, inclusion and equity, education for sustainable development and a culture of peace. We express our sincere gratitude to the Government of the People's Republic of China for hosting the Congress and for their warm welcome and generous hospitality,

**RECALLING** the recommendations of the International Congress on the Development and Improvement of Technical and Vocational Education (Berlin, 1987), the Convention on Technical and Vocational Education (1989), the Recommendations of the Second International Congress on Technical and Vocational Education (Seoul, 1999), the Revised Recommendation concerning Technical and Vocational Education (2001), the Bonn Declaration on Learning for Work, Citizenship and Sustainability (2004), the Bonn Declaration on Education for Sustainable Development (2009), the G20 Action Plan on Development (Seoul, 2010), the Declaration of the Least Developed Countries' (LDCs') Ministerial Meeting at the 13<sup>th</sup> session of the United Nations Conference on Trade and Development (Doha, April 2012), the outcomes of the two regional consultations organized in preparation for the Shanghai Congress (Oman Declaration and

Montego Bay Declaration) and the outcomes of the 2012 triennale of the Association for the Development of Education in Africa (ADEA)),

**STRESSING** that TVET is expected to contribute actively to the achievement of the Education for All (EFA) goals and Millennium Development Goals (MDGs) as the target date of 2015 approaches, and that its importance is being increasingly recognized on the threshold of the Rio+20 United Nations Conference on Sustainable Development (20-22 June 2012) and in the international discussions on the post-2015 international education and development agendas,

**NOTING** the significant achievements made in developing national TVET policies and improving coordination since the Second International Congress on Technical and Vocational Education, in particular regarding the articulation between education and training and the role of TVET in lifelong learning,

**ALSO NOTING** the ongoing conceptual debate around the definition of TVET, including the use of other terms such as “technical and vocational skills development (TVSD)”,

**RECOGNIZING** the new development and societal challenges linked to the emergence of knowledge societies, the rapid spread of information and communication technologies, the effects of the global financial crisis and the implications of climate change and demographic trends, and the emergence of new and often higher-level TVET skills,

**ALSO RECOGNIZING** that TVET can play an active role in addressing concerns related to the context, such as unfavourable socio-economic conditions including under-employment and unemployment – in particular of young people and women – poverty and deprivation, urban-rural disparities, food insecurity and limited access to health services, the particular challenges faced by the LDCs, Small Island Developing States (SIDS) and countries affected by conflict and disaster,

**BEARING IN MIND** the role of TVET in promoting cultural diversity and in ensuring the transmission of local knowledge and skills between generations, thus fostering human-centred development, and the need to consider TVET in relation to the specific country context, while recognizing its universal dimension,

**RECOMMENDS** that governments and other TVET stakeholders in UNESCO’s Member States consider implementing the following actions in response to the challenges identified during the Congress:

- 1. Enhancing relevance of TVET**

- Update and develop mechanisms and tools to identify current and future skills needs, to ensure the relevance of TVET programmes to rapidly-changing labour markets, economies and societies
- Include education for 'green' economies and 'green' societies as a part of TVET qualifications and programmes, and advance the 'greening TVET' agenda towards low carbon and climate-resilient growth and development
- Promote the integration of information and communication technologies (ICTs) in TVET to reflect the transformations taking place in the workplace and in society at large
- Pay particular attention to professions suffering from a deficit of skilled personnel
- Give more consideration to local needs and demands
- Develop frameworks and incentive mechanisms to promote the active involvement of relevant stakeholders in planning, governance, curriculum, qualifications development and assessment, as well as school-enterprise cooperation and workplace learning.

## **2. Expanding access and improving quality and equity**

- Develop effective policies aimed at improving teaching and learning processes. Specifically, develop policies and frameworks for professionalizing TVET staff, and develop and strengthen teaching standards for all levels
- Make efforts to enhance quality across the various types of TVET and in the multiple settings where it takes place, including through the definition of quality standards and benchmarks
- Promote cross-cutting skills such as problem-solving and critical-thinking, entrepreneurial skills and the capacity to adapt behaviour, in order to equip learners with skills for sustainable living and livelihoods
- Take innovative measures to provide quality and inclusive TVET, especially to disadvantaged groups including learners with disabilities, marginalized and rural populations, migrants and those in situations affected by conflict and disaster
- Improve gender equality by promoting equal access of females and males to TVET programmes, particularly in fields where there is strong labour market demand, and by ensuring that TVET curricula and materials avoid stereotyping by gender

## **3. Adapting qualifications and developing pathways**

- Support flexible pathways and the accumulation, recognition and transfer of individual learning through transparent, well-articulated outcome-based qualifications systems; reliable measures for assessment, recognition and validation of qualifications, including at the international level; exchange of information and development of trust; and

partnerships among all relevant stakeholders. Quality assurance mechanisms should be integrated into all parts of the qualifications system

- Link TVET with general education to ensure flexible pathways at all levels and facilitate the progression of TVET learners to higher levels of education as part of lifelong learning strategies. Ensure that all pathways provide young people with skills that are relevant to the labour market, along with good levels of literacy and numeracy and transferable skills, values and attitudes
- Develop career guidance systems to assist learners in choosing appropriate pathways, including by providing up-to-date labour market information and self-assessment tools to identify aptitudes and interests, and promote the acquisition of career management skills

#### **4. Improving the evidence base**

- Reinforce frameworks and instruments to improve collection of quantitative and qualitative evidence relevant to the formulation of the national policy agenda, including data on teachers and trainers, and its monitoring and evaluation. This should include the development of tools to measure the effectiveness and efficiency of policies
- Enhance national capacities to use evidence effectively in the policy cycle, including the capacity of social partners and civil society to contribute to this process
- Strengthen research into TVET, with a view to developing the information base and promoting more evidence-based policy-making
- Ensure coherence between national data collection and international standards and initiatives

#### **5. Strengthening governance and expanding partnerships**

- Create, as appropriate, approaches and frameworks that involve representatives of enterprises, workers, learners and civil society, including young people
- Develop partnerships for TVET in the framework of regional cooperation initiatives and areas

#### **6. Increasing investment in TVET and diversifying financing**

- Recognize TVET as an investment in human capital that produces a high return benefiting a broad range of actors including individuals, enterprises and the state, and give it high priority

- Diversify sources of funding by involving all stakeholders, in particular through the use of appropriate incentive mechanisms
- Promote targeted funding schemes to facilitate access of disadvantaged groups to TVET and to jobs, including 'green' jobs

## 7. **Advocating for TVET**

- Underline the essential role that TVET plays in promoting economic prosperity and social cohesion
- Raise the public profile and attractiveness of TVET among learners, families and all other stakeholders, including through the media, and inform them on the possibilities for progression, employment and self-fulfillment that TVET can offer;

**RECOGNIZES** that the active engagement of the international community, including multi- and bilateral actors as well as private institutions and civil society, is of vital importance to addressing the policy challenges for TVET, and **RECOMMENDS** that it:

- Recognize the essential role played by TVET in tackling youth unemployment and underemployment
- Ensure better visibility and support for TVET as an integral part of the post-2015 international education and sustainable development agendas
- Give particular priority to the development of research and analysis to provide a valid and robust evidence-based foundation for policy-making and the efficient and fair allocation and steering of resources
- Align international cooperation with national needs in TVET and cross-sectoral strategies to enhance ownership of development programmes and encourage further support in this area
- Give special priority to LDCs, SIDS and countries affected by conflict and disaster
- Draw concerted attention to Middle Income Countries (MICs), in view of the particular challenges they are facing
- Provide adequate platforms for international exchange on policies, instruments and approaches, hence supporting and benefitting from South-South and North-South-South cooperation ;

**INVITES** the Director-General of UNESCO to seek to implement the following actions:

- Facilitate the debate on the place of TVET and skills for the world of work in the post-2015 international education and development agendas, drawing lessons from the implementation of UNESCO's Strategy for TVET (2010-2015)
- Strengthen the role of TVET in holistic and inclusive human development
- Collect and disseminate evidence demonstrating the multiple and diverse policy approaches for transforming and expanding TVET, using the UNESCO-UNEVOC Network and UNESCO Chairs active in the field
- Expand and enhance the capacities of the UNEVOC Network to play a key role in developing the capacities of decision-makers and practitioners, and facilitate the involvement of all stakeholders
- Consider the relevance and currency of UNESCO's Convention on Technical and Vocational Education (1989) and the Revised Recommendation concerning Technical and Vocational Education (2001), with a view to the possible development of new or revised normative instruments adapted to a changing world
- In consultation with Member States and other concerned organizations, explore the possibility of setting up an international task force to develop international guidelines on quality assurance for the recognition of qualifications, based on learning outcomes, and identify a set of world reference levels, to facilitate the international comparison and recognition of TVET qualifications
- Building on the work already undertaken by the Interagency Group on TVET, in particular the Working Group on Indicators, and on the initiatives of the Human Resources Development Pillar of the G20 Multi-Year Action Plan on Development, provide, with the technical support of the UNESCO Institute for Statistics, the basis for developing cross-national statistical frameworks and data platforms for both regional and global monitoring
- Further expand UNESCO's cooperation with relevant United Nations and multilateral partners, as well as with regional development banks and organizations, including through strengthening the Organization's engagement in the Inter-Agency Group on TVET and its Working Groups
- Undertake appropriate regional and international follow-up actions. Acting in cooperation with development partners active in this field, build on and extend the outreach of the Shanghai Consensus.



United Nations  
Educational, Scientific and  
Cultural Organization



Third International Congress on  
Technical and Vocational Education and Training  
Shanghai, People's Republic of China, 13-16 May 2012

# MAIN WORKING DOCUMENT

## Transforming Technical and Vocational Education and Training



Building skills  
for work and life



United Nations  
Educational, Scientific and  
Cultural Organization



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• **Technical and Vocational Education and Training**  
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# Transforming Technical and Vocational Education and Training

## Building skills for work and life

### **MAIN WORKING DOCUMENT**



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# INTRODUCTION

Technical and vocational education and training (TVET) today faces huge demands, challenges and opportunities. Labour markets are rapidly changing and youth unemployment and social disengagement are among many pressing concerns facing UNESCO Member States. Worldwide, governments and other stakeholders expect TVET to address multiple social and economic development priorities, from poverty reduction, food security and social cohesion to economic growth and competitiveness.

In contexts of chronic unemployment and underemployment, young people themselves are demanding more opportunities for education and training, and an improvement in the relevance of education and training to the world of work. Self-employment requires entrepreneurial skills, and employers are calling for an ever increasing range and level of skills and competences, combining technical and interpersonal skills.

There are enormous challenges ahead. Despite significant efforts within and beyond the Education for All (EFA) movement, too few young people and adults are currently able to develop the skills, knowledge and attitudes they need for today's changing world of work. Furthermore, much TVET provision is poorly articulated with labour market demands and TVET is not contributing towards socio-economic development needs as much as expected. Although intended to support social mobility, some TVET policies, systems and programmes limit learners' future prospects and reinforce social inequalities.

This is the main working document for the Third International Congress on TVET, *Transforming TVET: Building skills for work and life*, in Shanghai, People's Republic of China, 13–16 May 2012. It is based on the preliminary findings of a UNESCO study on world trends and issues in TVET conducted as part of UNESCO's Strategy for TVET (2010–2015). It is intended to inform discussions in Congress sessions, to provoke critical reflections, and to inspire future developments in the field of TVET.

The UNESCO study looks in depth at the major trends and policy developments in TVET since the Second International Congress held in Seoul in 1999. This work has two main objectives. The first is to analyse world trends in TVET in the context of wider development trends since the Second International Congress. The second is to advance conceptual and policy debates on TVET to address persisting challenges and to proceed towards future frontiers.

The work takes stock of the current situation and asks what policy measures might now be taken, in times of economic uncertainty, to facilitate TVET learning and skills progression by more young people and adults.

Although much has been achieved towards the development of TVET and TVET policies, and coordination has been improved since 1999, this work asserts that available analytical tools and policy approaches to TVET are not sufficient for addressing current and future challenges. Until now there has been a tendency to undertake only partial analyses for the design, implementation, monitoring and evaluation of TVET strategies and policies.

Given the growing importance of skills in driving socio-economic development, and rapidly changing skill requirements, it is asserted that countries need to scale up the quantity and quality of skills development through TVET. However, it is assumed that simply scaling up existing models of TVET provision to more young people and adults is not the solution, but that profound transformations are needed in the conceptualization, governance, funding and organization of TVET to prepare individuals and their societies for the future.

The UNESCO study examines evidence from a range of countries in all world regions to identify trends in TVET development and policy options. It locates developments in the context of wider social, economic, political and educational changes so as to provide a well-founded assessment of where TVET is at present, and how policy initiatives might better prepare individuals and their societies for the future. The work's main added value is in the promotion of more integrated and development-sensitive analytical approaches with

which to take account of a range of country-specific situations. This work argues for increased attention to the interactions between policies on TVET, labour market, education, and the environment and other related policies that can collectively support sustainable development. This approach both draws attention to the need to transform TVET, and generates some insights into what this transformation might mean for policy-makers and other stakeholders.

TVET is already high on national, regional and international agendas. As the 2015 target date for the EFA goals and the Millennium Development Goals approaches, TVET is receiving considerable attention internationally. UNESCO is currently reviewing the future of the two normative instruments in this field, the Convention on Technical and Vocational Education (1989) and the Revised Recommendation concerning Technical and Vocational Education (2001). In 2012, as well as the Third International Congress on TVET and the UNESCO study on world trends and issues, the EFA Global Monitoring Report is examining how skills development programmes can improve young people's opportunities for decent jobs and better lives. It is fully expected that TVET will have a prominent place in the post-2015 international education and development agenda.

The scope of TVET is very diverse and varies widely from country to country. It is strongly influenced by historical factors and philosophies of education and training, as well as the organization of work. This study covers formal, non-formal and informal TVET learning for young people and adults taking place in multiple settings, including the formal economy and the informal economy.

One consequence of TVET's diverse scope is the challenge of collecting and analysing TVET data and drawing meaningful comparisons between TVET systems in different country or regional contexts. This present work does not seek to generalize or prescribe ready-made solutions. Rather, it aims to inform the debate on ways to successfully transform TVET to contribute to wider development priorities.

The UNESCO study is intended to inform TVET policy-makers and stakeholders across the panorama of TVET situations in UNESCO Member States. This synthesis report and the full UNESCO study are organized in three parts as follows:

**Part 1: *Global developments and their implications for TVET*** identifies and analyses some of the significant developments that have had an impact on TVET since the Second International Congress in Seoul in 1999. These include demographic trends, labour market trends, technological innovation, the impact of globalization, education reforms and sustainable development issues, including climate change, and concerns for peace and security.

It is argued that these development trends are shaping the environment in which future TVET policies will emerge and operate and that will influence their success. While some of these trends were already significant in 1999, these have since developed new features, and some elements have emerged as more important than others. The likely impact of these developments on the world of work and implications for skills demand are considered.

**Part 2: *Analytical lenses, policy areas, challenges and advancing the frontiers*** begins by elaborating on the innovative analytical approach which combines three lenses: an economic lens, an equity lens and a transformative lens. When used together, these lenses can help to provide 'stock-taking' insights into TVET policies in different countries, aspects that may need to be considered for reform, future policy choices and possibilities. In so doing the work helps establish a basis for a new and more holistic approach to TVET policy analyses and reforms.

**Part 3: *Partnerships for transforming TVET*** finds that, based on the stock-taking exercise in Part 2, there is a need for a transformation of the vision and core characteristics of prevailing TVET systems to achieve the expansion of relevant and attractive TVET learning opportunities for young people and adults. Part 3 emphasizes that transformation is likely to depend on the national ownership of TVET policies and strategies and new partnerships within wider visions of development. Key requirements are likely to be strengthened multi-stakeholder partnerships in TVET systems, capacity development of national stakeholders, a strong knowledge base and a supportive role by the international community.

# Global Developments and their Implications for TVET

PART 1



# PART 1

## Global Developments and their Implications for TVET

**Part 1 reviews global developments which have significant implications for TVET. These include demographic trends, labour market trends, technological changes, globalization and education reforms, sustainable development issues, and peace and security concerns. Each of these merits consideration within TVET policy processes.**

UNESCO Member States have long recognized TVET's potential to make an essential contribution to social and economic development, and this is signified by the existence of UNESCO's two normative instruments in this field.<sup>1</sup> Participants in the Second International Congress on Technical and Vocational Education observed that the twenty-first century would be characterized by knowledge, information and communication, and emphasized the need for a new human-centred development paradigm as a consequence of globalization and the revolution in information and communication technology (ICT). The Congress highlighted TVET's roles in promoting a culture of peace, gender inclusiveness, environmentally sound sustainable development and international citizenship. TVET's contribution to sustainable development was articulated further in the 2004 Bonn Declaration on Learning for Work, Citizenship and Sustainability.<sup>2</sup>

Contemporary development thinking requires the pressures on natural resources, the environment and the climate to be addressed. It also calls for the capacities to address and respond to new concerns resulting from demographic, socio-economic, employment and work organization changes, as well as technological change, globalization and other issues such as peace and security. All these factors are now shaping the structural, long-term policy environment for TVET as well as challenging its capacity to develop adaptive and innovative responses. Developing a better understanding of the skills, knowledge and attitudes that are needed today and in the future, and ensuring that the right combination is being taught and learned in effective and equitable ways, will determine the long-term contributions of TVET. These major global developments will now be considered in turn.

### 1.1 Demographic trends

The last decade has seen continued rapid population growth, with the segment of the population younger than 14 years of age increasing most rapidly in developing countries. In developed countries, the ageing of the population has accelerated. With fertility rates dropping nearly everywhere and life expectancy rising in most of the world's regions, the ageing phenomenon is becoming a major challenge for the next decades, even though its impacts will be uneven.

According to the United Nations, during the present decade, the working-age population will increase globally by around 600 million. The highest increase is expected in the least developed countries (LDCs), which by 2020 will have almost 460 million more persons of working age than in 2011. However, in the same period, the working-age population will decline in developed countries by almost 17 million.

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1 UNESCO. 2005. Revised Recommendation Concerning Technical and Vocational Education 2001; Convention on Technical and Vocational Education 1989. *Normative Instruments Concerning Technical and Vocational Education*. Paris, UNESCO.

2 <http://unesdoc.unesco.org/images/0014/001405/140586m.pdf>

These demographic changes have impacted the labour market and TVET in developed and developing countries in various ways which are set to continue.

In developed regions, ageing populations will continue to put pressure on social security outlays and public finances. This is triggering new welfare policies that aim to postpone the retirement age and thus take full advantage of the productive potential of older and healthier populations. Governments will need to further support this by implementing effective legislative, institutional and funding arrangements for continuing TVET and by encouraging enterprises and individuals, for example through incentives, to invest in skills development including validation of prior learning, as well as by using appropriate approaches to lifelong career guidance and counselling. In less developed regions, demographic trends will exert pressure on labour markets to create jobs capable of providing decent work for increasingly more educated labour forces. From a skills development perspective, this will require the expansion of TVET learning opportunities particularly for young people, and empowering them so that they can meet labour market challenges. Increasing learning opportunities through TVET will also require the improvement of innovative funding mechanisms, and new forms of partnerships, networks and alliances at all levels, between public, private and civil society stakeholders.

International migration is likely to continue to increase, in both scale and complexity, due to the growing demographic disparities mentioned above, the effects of environmental change, new global political and economic dynamics, technological revolutions and expanding social networks. As an implication, the national character of TVET qualifications is being challenged and they are increasingly expected to convey their regional and international value.<sup>3</sup> Also, the right to live and work in a foreign country is increasingly linked to qualifications. Effective international cooperation and dialogue on the recognition of qualifications can promote the mobility of skills.

## 1.2 Labour market trends

During the last decade, high youth unemployment persisted and was further exacerbated by the global economic crisis. In this context, there is little prospect for a substantial improvement in the near future because of a longer tendency towards jobless growth. For example, between 1999 and 2008, global GDP increased by 47 per cent, but global unemployment declined by only 0.7 percentage points, from 6.4 per cent to 5.7 per cent.<sup>4</sup> International Labour Organization (ILO) and International Institute for Labour Statistics (IILS) projections<sup>5</sup> show that – even with an optimistic analysis – under current growth estimates, employment growth in advanced economies is not expected to recover to pre-crisis levels before at least 2016. According to the 2012 Global Employment Trends report of the ILO, the world faces the ‘urgent challenge’ of creating 600 million productive jobs over the next decade in order to generate sustainable growth and maintain social cohesion.

The mismatch of supply and demand for skills is often emphasized by policy-makers as the key reason for high youth unemployment and the difficult transition from school to work. However, countries differ in the challenges they face with both the supply and demand of skills. In some countries, high unemployment rates coexist with severe skills shortages, and in others skilled populations struggle to find adequate work opportunities. The policy concern regarding the skills mismatch is further exacerbated by increasing demand from enterprises for TVET graduates with more relevant skills. For instance, enterprise surveys by the World Bank since 2000 in some 90 countries – several of which were repeatedly surveyed – suggest that skills constraints impede firm performance, particularly in more dynamic environments.

3 European Training Foundation (ETF). *Qualifications that Count: Strengthening the recognition of qualifications in the Mediterranean region* (MEDA ETE regional project), Turin, ETF, 2009.

4 Graziosi, A. *Training Institutions and Labour Market Needs: Bridging the Gap*. International Labour Organization International Training Centre (ILO-ITC), April 2011. <http://stcex.gotevot.edu.sa/program/pres/mon/p101.pdf> (Accessed 14 March 2012).

5 ILO and International Institute for Labour Statistics (IILS). *World of Work Report: Making Markets Work for Jobs*. Summary preprint edition, 2011. [www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/genericdocument/wcms\\_166402.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/genericdocument/wcms_166402.pdf) (Accessed 14 March 2012).

There is also a skills mismatch in the informal sector, which includes a lack of basic literacy and numeracy skills, broader life skills, vocational and entrepreneurial skills and citizenship skills. There is also a lack of labour rights and child labour is a particular concern.

### 1.3 Technological changes

The history of the evolution of technology is marked by waves of innovation based on certain sources of energy and types of inventions. Although their impact varies from country to country, each wave of innovation (e.g. steam power; electricity) has direct implications for how societies produce wealth and can raise standards of living.

As successive waves of innovation take over, a time series suggests that their duration of relevance becomes shorter. In other words, the period between the appearance of new technologies, their mainstreaming and their replacement by newer technologies, is reducing in length and making older technologies obsolete faster than was the case with previous innovation waves.

This rapid technological progress implies the need for workforces that not only have specialist knowledge and skills, but have developed the generic skills needed to adapt quickly to new emerging technologies.

### 1.4 Inclusive globalization

A new phase of globalization is expected, reflecting the new multipolar world order. Meanwhile, persistent economic volatility and worries about sovereign debt, currencies and joblessness continue to trouble the global economy. From an international perspective, economic development continues to be highly uneven.

Given the central role of skills in determining a country's capacity to profit from globalization, TVET policies can play an essential role in helping economies to break out of the low-skills equilibrium. Widening participation in TVET learning can potentially support a more inclusive globalization which enables more individuals and their societies to benefit.

Rapidly changing skills requirements in the context of globalization have amplified the role of TVET in supporting economic growth and competitiveness, which in turn can support the creation of work opportunities. As a consequence, more countries today need a labour force equipped and continuously updated with knowledge, skills and attitudes that cannot be acquired through basic education alone.

### 1.5 Education reforms

A growing body of evidence suggests that the formation of skills is a life-cycle process. In this perspective, the success with which investments in TVET are transformed into valuable skills is affected by previous educational attainments.

As noted by UNESCO's EFA Global Monitoring Report 2011, the positive achievements of the EFA movement have been tempered by the inadequate quality of basic education and the great number of out-of-school children. Children with low educational attainments may increasingly face barriers that affect their future TVET learning.

The UNESCO Institute for Statistics Global Education Digest 2011 highlights the rising demand for secondary education worldwide. The report indicates that 88 per cent of children enrolled in primary school reached the last grade of this level of education in 2009, compared with 81 per cent in 1999. As enrolment in secondary education is bound to expand, secondary TVET will also potentially expand and change, depending on political choices. In many countries the line between general and vocational curricula is increasingly shifting and fading, leading to forms of 'hybridization' that should reduce the traditional dichotomy between academic programmes and occupation-specific vocational programmes.



Progress towards universal secondary education coverage raises the issue of increasing TVET opportunities at post-secondary level. As the interface between an expanded post-secondary education and the world of work both widens and deepens, key stakeholders, including students, employers and funders, are calling for increasing labour market relevance. This, in turn, is leading to efforts by education systems and institutions to demonstrate the linkages between existing programmes of study and the world of work, particularly through different forms of vocationalization of post-secondary education.

## 1.6 Sustainable development issues

Pressures on natural resources, the environment and the climate necessitate a transition from energy and emissions-intensive economies to energy-saving and cleaner patterns of production and services. The greening of the economy implies changing skills needs as new industries and occupations emerge, alongside new skills profiles in many existing occupations. This affects training needs and delivery. In responding to sustainable development issues, TVET needs to be able to adapt to changing economic and social demands by creating relevant TVET learning opportunities for all young people and adults throughout their lives, while not compromising the ability of future generations to meet their own needs. According to the website of the forthcoming United Nations Conference on Sustainable Development (Rio +20),

Sustainable development emphasizes a holistic, equitable and far-sighted approach to decision-making at all levels. It emphasizes not just strong economic performance but intra-generational and intergenerational equity. It rests on integration and a balanced consideration of social, economic and environmental goals and objectives in both public and private decision-making.<sup>6</sup>

Within this broad sustainable development agenda, there is specific attention to the relations between economic development and the environment, and the concepts of 'green economies' and 'green societies'.

## 1.7 Peace and security concerns

Concerns for peace and security intersect with TVET policies and strategies in numerous ways, and these are becoming increasingly prominent in policy circles. TVET is considered to have a crucial role in post-conflict reconstruction, including for the reintegration of ex-combatants into their communities and the socio-economic recovery of affected populations. TVET is also regarded as a means of preventing conflict, through its contributions to social inclusion, social cohesion and citizenship. In reality, however, TVET does not always play a uniting role, and this is most evident where TVET provision is divided along lines of gender, social class, language, culture or religion. In some historically divided societies, efforts have been made to support reconstruction and reconciliation by merging formerly separate public institutions and systems. In such cases concerns for nation building, peace and security can be powerful political drivers of TVET reform.

## 1.8 Conclusion

It is clear that these development trends are complex and intertwined, operating in different ways across diverse contexts. The implications of each for skills development through TVET vary from country to country. Therefore the study cautions against moving straight from a discussion of development trends to a discussion of relevant policy options. The review argues that greater attention should be given to holistic analytical approaches which bring into stronger focus the relations between contexts, TVET policies and development objectives. Transforming and expanding TVET will require creativity and innovation, to build on and to go beyond past experiences.

<sup>6</sup> <http://www.uncsd2012.org/rio20/index.html>

# Analytical Lenses, Policy Areas, Challenges and Advancing the Frontiers

PART 2



# PART 2

## Analytical Lenses, Policy Areas, Challenges and Advancing the Frontiers

**Part 2 examines how policy-makers can improve and transform existing TVET policies by applying three interlocking analytical lenses – economic, equity and transformative lenses – to ten policy areas identified through an intensive review of international experiences. Further, it discusses the persisting challenges and how to advance the frontiers by introducing themes for global debate.**

### 2.1 Lenses for analysing TVET policies

Successful TVET policy and reform entail engaging with quite a complex mix of policy areas. TVET policies can be understood in terms of their potential and actual contributions to addressing interconnected concerns. It has been observed that the current analytical tools and policy approaches to TVET are not sufficient to address the present and future challenges. To shape and review the policy areas in a comprehensive way, the study has introduced the following lenses:

1. An economic lens: for examining the efficiency and effectiveness of TVET and the extent to which it is accountable, responsive and attractive.
2. An equity lens: for considering the extent to which TVET promotes access, equity and inclusion, and for understanding the implications of developing TVET for all.
3. A transformative lens: for seeing the possibilities of a transformed TVET in a lifelong learning perspective that is context sensitive and more focused on innovation and sustainable development.

#### 2.1.1 The economic lens

The economic lens is used to analyse the efficiency and effectiveness with which TVET supports favourable outcomes for learners in the world of work, and the extent to which TVET can meet labour market demands for skills. In pursuit of the economic purposes of TVET it is also necessary to consider matters of accountability, responsiveness and attractiveness.

Increasing accountability is an important issue for TVET, and finding ways to make TVET systems more accountable at all levels is a major challenge. In this regard it is crucial to improve the capacity of policy-makers, systems, institutions and providers to better understand and respond to the voices of different TVET stakeholders, and to make the views of stakeholders an integral part of planning and policy processes. Many attempts to develop a more responsive relationship between education systems and local, national and regional labour markets and economies have been made in recent years. Reforms have also stressed the need to improve the attractiveness of TVET to prospective learners, their communities and employers.

#### 2.1.2 The equity lens

TVET should promote access to skills on the part of all learners, male and female, regardless of class, ethnicity, age, disability or other social attributions. If TVET is to be effective in promoting equity in its interactions with the labour market, then equity has to be thought of in terms of both access and outcomes.

When considering equity of access, it is important to reiterate that inequity in TVET access is also highly structured. Access to initial TVET, whether public or private, depends to a large extent on educational attainment level and socio-economic and other characteristics, and can serve to reward those who are already relatively advantaged. Women, particularly those with young children, minorities, and people living with disabilities often have less access to TVET than their peers.

The main focus of the equity lens is for analyzing the capacities of TVET to meet the challenges of advancing access, equity and inclusion in TVET learning (formal, non-formal and informal), whether in structured programmes, in the world of work or in everyday life.

### 2.1.3 The transformative lens

The transformative lens strengthens the analysis of TVET systems and policies from lifelong learning and sustainable development perspectives. It questions how well current approaches to TVET are likely to meet the needs of future labour markets and future generations. The transformative lens also asks how TVET can best support innovation and the development of green and sustainable economies and societies. It helps stakeholders create a vision of TVET that is more responsive to contextual factors and long-term development trends. The transformative lens widens the conceptualisation of TVET to encompass 'learning to be' and 'learning to live together', as well as the more traditional 'learning to know' and 'learning to do'.

### 2.1.4 Conclusion

Each of these lenses can provide an important focus for the formation, adjustment and reform of TVET. The importance given to each lens should vary in different situations, depending on choices made and the local contexts, cultures and values. The point here is that these three lenses need to be combined, though in different ways depending on the context. How policy-makers and stakeholders use the three lenses and give each one different emphasis is a matter of social dialogue in specific contexts. These lenses used together enable TVET policy areas, which relate to the dimensions of vision and mission, access and inclusion, quality and relevance, and delivery capacities, to be considered in relation to the challenge of facilitating relevant TVET learning for more young people and adults. These lenses help to bring a broader perspective to TVET itself, which in this view encompasses a diversity of formal, non-formal and informal TVET learning in multiple settings.

TVET policy debates have historically attended mainly to economic and equity concerns, and these have their limits. Adding the transformative lens helps to formulate a more comprehensive analytical tool to bring into focus the variety of TVET policy options.

## 2.2 TVET policy areas

This section applies the analytical approach introduced above to the ten TVET policy areas: (1) Governance; (2) Demand-driven TVET; (3) Social goals; (4) Inclusive TVET; (5) Empowering learners; (6) Modernizing TVET provision; (7) Improving work-based learning; (8) TVET teachers and trainers; (9) ICT in TVET; and (10) Financing TVET. In each area, the work considers some of the major challenges and issues. It then outlines some of the policy options currently in use, which in themselves are shown to have certain limitations. The analytical approach is then applied to reveal potential ways forward that may merit consideration by policy-makers in relation to their own contexts.

### 2.2.1 Governance of TVET

Good governance is a clear prerequisite for successful TVET reform at the system level. In particular, how to achieve improved coordination and to involve a wide range of actors, to set priorities and ensure accountability based on adequate information, have received considerable attention over the last decade.

To help providers to design TVET programmes relevant to the world of work, many governments have begun to review their roles, and rather than providing TVET programmes themselves, are becoming facilitators, steering TVET reforms through a range of legislative and financial mechanisms. The establishment of a TVET coordinating body is one way that some governments engage leaders from economic sectors in TVET oversight and strategy.

In some countries there continues to be fragmentation and a low level of participation of relevant stakeholders. In some cases this is owing to the uncoordinated provision and rigidity of centralized bureaucracies. In other countries capacities to collect and analyse the data required to set relevant priorities are weak.

The review has identified a number of policy approaches which aim to improve governance. These include:

- ▶ Making TVET part of a strategy.
- ▶ Engaging stakeholders in active partnerships.
- ▶ Deciding whether to decentralize, and how.
- ▶ Reviewing and reforming qualifications.
- ▶ Developing quality assurance processes.
- ▶ Achieving an improved evidence base for policy development.
- ▶ Linking policy frameworks and implementation strategies in order to realize reform.

While the emphasis placed on economic, equity and transformative dimensions varies between the different TVET settings, a major task in modern, shared systems of governance is to build partnerships and a broad consensus among stakeholders about the main priorities for TVET. To achieve this, capacity development, information, knowledge and robust evidence are needed.

### 2.2.2 Demand-driven TVET

From the economic perspective, maintaining and improving the correspondence between the supply and demand of knowledge and skills is a prime task for TVET, and it remains a challenge. In most countries the public TVET system remains largely supply driven. Many countries have adopted competency-based curriculum reforms. Competency-based training pays more attention to learners and their ability to master practical tasks and to acquire competences than to the level or type of certification, or the length of training. The feature that distinguishes competency-based curricula from traditional curricula in TVET is that they are developed in accordance with identified skills needs derived from the workplace. This is achieved in collaboration with sectoral organizations, associations and chambers, employer associations, and also with government departments, such as ministries of health, acting as employers. Internationally, stakeholders are starting to work together to identify the key aspects of knowledge and skills needed for improved performance in particular sectors of the economy. Round tables and occupational studies are the most frequent methods used. Some countries have managed to create well-developed structures (sectoral and/or national) specifically responsible for aligning TVET with the demand side of the labour market.

In their efforts to orient TVET towards skills demands, countries have been:

- ▶ Implementing policies for enhancing the capabilities (knowledge, skills, attitudes, etc.) that people can bring to the labour market.
- ▶ Reducing the skills mismatch between the demand and supply of labour.
- ▶ Finding ways to identify and anticipate prevailing skills needs across complex labour markets, both formal and informal.
- ▶ Identifying which broad and transferable skills learners should develop alongside specialist skills, then deciding how to best implement a new approach to skills development.
- ▶ Supporting reforms that improve the links between supply and demand of skills across diverse labour markets.

Demand-driven approaches have sometimes focused on preparing young people and adults for the short-term needs of employability rather than longer-term demands of economies and societies. When the equity and transformative lenses are used for the analysis, it is easier to understand 'demand' in a more integrated and sustainable way. The implication for TVET is that as well as occupation-specific skills, learners need transferable skills and competences for lifelong learning.

### 2.2.3 Social goals of TVET

Considering how TVET can help to overcome disadvantage, achieving social as well as economic goals has become a strong feature of TVET policy debates and a characteristic of reform measures since the Seoul Congress in 1999.

Within this approach, there is a range of policy choices governments can make, including:

- ▶ Identifying the pressing social goals of TVET in the light of local contexts and strategies.
- ▶ Finding ways to adapt TVET teaching and learning so that they have a positive impact on social inclusion, social cohesion, health and well-being.
- ▶ Ensuring that TVET respects and nurtures local cultures, but is also responsive to regional and global changes and agendas.

Social problems necessarily reflect local contexts, and variations for example between rural and urban regions. Nonetheless, there are a series of widespread social concerns that TVET can address. Creating linkages between TVET policies and social policies is essential for ensuring efficiency and avoiding duplication and gaps in policy and service delivery. In addition, using the transformative lens can reveal innovative ways to achieve both social and economic benefits, for example through social entrepreneurship. Another example is in the development of skills for cultural industries which can respect and value indigenous knowledge and support sustainable livelihoods.

### 2.2.4 Inclusive TVET

TVET has a role to play in combating multiple forms of disadvantage, and overcoming barriers to entry and progression in the world of work and in further learning. However, if these efforts are to succeed, obstacles that exist within TVET systems also have to be recognized and addressed.

Certainly, some groups encounter more barriers to entry into further learning than others. For instance, there is a growing acceptance that TVET has to combat discrimination and promote inclusion, especially for girls and women. Specific policy choices are called for to make both public and private TVET more inclusive and equitable. This process begins with an awareness of the learning needs of a more diverse population of learners. By working together with employers, TVET providers can offer additional support to disadvantaged learners in their transition from initial TVET to work. In this way TVET providers can become key partners in combating discrimination and promoting inclusion through, for example, careers guidance and counselling.

A number of policy choices can be identified using the equity lens which may help overcome the barriers preventing individuals accessing to TVET. These include:

- ▶ Identifying priority groups, and which policy approaches may be most effective to reach them.
- ▶ Finding ways to make both public and private initial TVET more inclusive.
- ▶ Supporting better transitions to work for the most disadvantaged.
- ▶ Working with employers to improve workplace training and to develop inclusive workplaces.
- ▶ Securing collaborative approaches to achieve these objectives.

A more inclusive learning system is one key dimension of 'TVET for all'. Using the economic and transformative lenses here draws attention to the need to ensure that intended beneficiaries experience improved labour market and life prospects in the long term.

## 2.2.5 Empowering learners

Focusing on the learner implies that TVET providers have to learn to adapt and reform in order to attract and better meet the needs of diverse learners. This provides a dynamic link between the broader, strategic areas of policy concern and more detailed and localized aspects of TVET provision.

Policy aspects that support learners as they make choices to participate and progress in TVET and the world of work may include:

- ▶ Offering information, advice and guidance service.
- ▶ Linking TVET provision or access to the acquisition of basic skills and life skills.
- ▶ Developing, in time, more flexible learning opportunities intended to fit better with the diverse lifestyles of learners.
- ▶ Providing incentives for learners to participate in TVET learning, and in particular, to acquire TVET qualifications.

Within this policy area, TVET learning becomes an integral part of personal development and innovation, and is essential for adapting to changing circumstances in work and life. While empowering learners is consistent with the transformative lens, attention is needed to ensure that the potential benefits for individuals also translate into wider social benefits.

## 2.2.6 Modernizing TVET provision

Given the key importance of TVET providers in shaping learners' achievements and opportunities, the development and reform of TVET provision has received much policy attention during the last decade. A great deal of attention has been paid in different countries to the image of TVET and to the factors that make some schools work more effectively than others. In many cases, internal institutional factors such as leadership, quality of the teaching staff, ethos, the organization of teaching and learning, how the curriculum is implemented and links with families and local communities make significant differences to the quality of the learning and the outcomes that students achieve. Both quality of the learning and its outcomes in the labour market are crucial for improving the image of TVET and its attractiveness. In the public sector, two key factors have contributed to a new emphasis on renewing the management and culture of public TVET providers: the shift towards some form of decentralization and autonomy, and the call to make public TVET institutions more efficient, effective and accountable.

The performance of TVET institutions varies in different countries according to historical developments and the policy choices made. The factors include:

- ▶ Deciding which policies for institutional-level reform are most appropriate.
- ▶ Deciding how best to develop TVET school and college management.
- ▶ Finding ways to optimize the professional contribution of teachers.
- ▶ Developing and reforming the curriculum.
- ▶ Making the lines between different programmes of study less sharp, allowing more overlap and hybridization to occur.
- ▶ Defining the roles of post-secondary education in responding to these trends, and developing appropriate links between TVET and post-secondary education.

A focus on efficiency and accountability, together with competition for resources, has meant that modernizing provision has not always been good for equity. Applying the equity and transformative lenses to this policy area reveals the need for TVET providers to achieve a balance between the modernization agenda and local development needs.



### 2.2.7 Improving work-based learning

Workplaces are the most common and important site of learning for adults. Yet training in companies across many sectors and in many countries is often rudimentary, at best. TVET in the informal sector of the economy is a principal route to skills and work for large numbers of workers, but is often of low quality and continues to receive relatively little policy attention.

Some countries have placed work-based learning for youth and adults at the centre of their approach to TVET. Apprenticeship schemes are going through a worldwide upswing and this trends seems set to continue. In several countries, sector skills councils are promoting initial and continuing TVET in workplaces.

To improve the quality of TVET learning in the informal sector, some governments are offering literacy and numeracy programmes, offering skills upgrading for master crafts people, including pedagogical skills, and providing information to potential apprentices about the demand for skills.

A number of policy options are open to governments and other TVET stakeholders to improve work-based learning. These include:

- ▶ Building a national strategy and coalition for continuing TVET in workplaces.
- ▶ Revisiting apprenticeship in the formal sector.
- ▶ Developing the role of sectors and their organizations in the management and organization of training.
- ▶ Supporting higher-skill workplaces.
- ▶ Reorienting public and private TVET to prepare learners better for the informal economy.
- ▶ Upgrading existing TVET approaches in the informal economy.
- ▶ Continuing TVET for workers in the informal economy.
- ▶ Aligning TVET for the informal economy with national TVET systems.

The key challenge remains to ensure that the lifelong characteristics of workplace learning are reflected in national TVET strategies and policies. Equally, workplace learning needs to be seen and planned for as a part of national strategies for innovation and sustainability.

### 2.2.8 TVET teachers and trainers

While TVET policy aims and reform choices often call for improved training for TVET teachers and trainers, the low status of TVET teaching as a profession and the lack of training are frequently barriers. Also, TVET teachers and trainers are a diverse and dispersed occupational group, and yet they are often expected to provide successful and innovative programmes for ever more heterogeneous groups of learners. Almost everywhere there is a shortage of continuing development of TVET teachers and trainers: how they will stay 'qualified' and how they will progress in their careers have received little attention.

Policy options regarding TVET teachers' and trainers' learning, skills and career development include:

- ▶ Considering the competence profile and frameworks that may be appropriate for TVET teachers and trainers.
- ▶ Optimizing pre-service TVET teacher and trainer education.
- ▶ Enhancing the continuing professional development of TVET teachers and trainers.

Teacher training policies should take into consideration barriers preventing teachers from actively contributing to TVET reforms and participating and investing in lifelong learning. Immediate measures to reward teachers and trainers may work in the short term, however using the transformative lens would suggest promoting teachers' participation in decision making processes, developing career management and improving support to career progression.



### 2.2.9 Information and communication technologies in TVET

The rapidity of changes in ICT poses serious challenges for planners and providers who are seeking to respond to new opportunities for TVET systems. Indeed, there is a strong case for all TVET planners and providers to consider and respond to the ICT needs of all learners, as these relate both to occupational needs and to wider citizenship and education concerns. At the same time, the obvious limits of budgets and capabilities need to be addressed and overcome.

Large numbers of workers across different sectors have to use ICT as an integral part of their work. They need initial training and upgrading to function safely and productively. Much learning in these areas is done informally. Planned responses to ICT needs at institutional and systems level call for several kinds of ICT readiness: strategic, pedagogic, organizational and technical readiness.

Some of the policy options used by TVET planners and providers include:

- ▶ Optimizing the opportunities provided by ICT and on-going developments, bearing in mind the obstacles to doing so.
- ▶ Meeting ICT skills needs in the workplace, both as generic skills and for ICT specialists.
- ▶ Harnessing ICT for learning in the workplace.
- ▶ Planning an approach to ICT in TVET provision that is efficient and effective, and helps to address digital divides.

It is clear that the use of ICT can offer significant new possibilities for improving efficiency and equity in TVET. A strong argument is often made that ICT use is also a route to innovation and lifelong learning in TVET and the workplace, through for example, social networks, e-learning and access to open educational resources.

### 2.2.10 Financing TVET

Diversifying the sources of funding, and effective and efficient institutional financial management for TVET, have become major areas of concern since the Seoul Congress in 1999. Countries' experiences show that adequate financing of TVET is vital for the successful linking of TVET policy formulation and implementation.

Determining the adequate balance between the costs borne by the public budget and those borne by other TVET stakeholders has been a key policy focus. In reality, this depends on the one hand on the economic situation and priorities of governments, and on the other, on investment incentives and expected benefits for other stakeholders.

Although primary responsibility for TVET financing is at country level, an important potential source of TVET finance in many countries is official development assistance (ODA). Most development assistance for TVET over the last decade has been for the kind of policy and systems development work described across the ten policy areas, rather than for the infrastructural development and human resources expenditure that were typical in earlier phases.

Efficient and effective financing of TVET is essential for linking policy formation with successful longer-term policy implementation. Policy approaches to enhance efficient and effective financing include:

- ▶ Targeting limited financial resources strategically.
- ▶ Finding ways to mobilize the best possible financial resources for TVET, including contributions from international donors and TVET beneficiaries.
- ▶ Optimizing, in particular contexts, the efficiency, effectiveness, relevance and accountability of TVET funding mechanisms.

Ensuring that all young people and adults benefit from TVET learning will require a dramatic increase in the funds available. As external financing cannot be relied upon, countries themselves will have to decide how much to prioritize investment in TVET.

Given demographic and other development trends there is likely to be a further shift in the near future towards the lifelong dimension of TVET funding, an area that does not yet feature prominently in many countries. This provides a justification for designing innovative funding schemes, for optimizing spending and for sharing the costs with enterprises and in some cases with individuals.

### 2.2.11 Conclusion

During the last decade much of the work in these ten policy areas, including the emergence of specific policy options, has been mainly influenced by economic and equity concerns. These concerns have their limits, and as a result so has the policy work. While there may have been some awareness of the ideals of sustainable development, few countries have fully integrated sustainable development issues within their TVET policies and strategies. While equity and economic concerns remain valid, this study shows the analytical benefits of adding a concern for transformation which better connects TVET policy formulation with contexts, wider policies and sustainable development.

Part 2 of the study uses the lenses to analyse TVET policy experiences and some of the policy options that are most evident at the national level. Crucially, from this can flow well-grounded approaches for taking stock of contemporary TVET policies, their achievements, potential and limitations. When the integrated analysis is applied in specific country contexts, new sets of policy options and new combinations for consideration will emerge. However, in its review of TVET reforms internationally, this study finds limited availability of country reports, TVET policy evaluation studies, relevant empirical data or other research materials on which to base an analysis. Addressing this deficiency is one of the persisting challenges discussed in the following section.

## 2.3 Persisting challenges

From the above analysis of prominent policy areas, six persisting challenges are evident. These are promoting skills for youth employment; ensuring access to TVET for all; improving the image and quality of TVET; financing TVET; strengthening innovation and research; and advancing sustainable development. It should be noted, however, that the challenges vary from country to country, depending on local contexts and different specific TVET needs and complexities.

### 2.3.1 Promoting skills for youth employment

High rates of youth unemployment exist almost everywhere and this has become a structural problem in many countries. This situation denies opportunities for millions of youth to make their creative contributions to society. As well as being a threat to social cohesion, the weak labour market integration of youth is a loss to development as a whole. A persistent challenge for TVET is therefore to assist youth in learning skills for successful transitions between learning and work.

The integration of youth into social and economic life depends upon analysing both the supply and demand for skills and involving relevant stakeholders, including youth, in decision-making processes. Attention to early skills needs assessment and forecasts are important for TVET to become more responsive to enterprises and individuals' needs. This requires closer partnerships among public, private and civil society organisations to promote relevant programmes and initiatives for youth employment.

### 2.3.2 Ensuring access to TVET for all

This significant time of demand, challenge and opportunity for TVET compels policy-makers to attempt to make TVET learning available to all young people and adults. Whereas historically participation in TVET learning was related to a relatively narrow range of occupational areas, this has now changed. Policy-makers and stakeholders, including donors, need to recognize that across different phases and areas of education and training, as well as across different settings of working, community living and individual lifestyles, a great deal of TVET learning is already going on. Once the extent of existing TVET learning is understood better,

policies can potentially become more relevant and equitable. 'TVET for all' implies, among other issues, ensuring that historical socio-economic divisions are overcome.

Numerous barriers to TVET access, participation and progression exist and can be identified. Policy-makers can ensure that these barriers are tackled and lowered as far as possible. Positive incentives are usually needed, and improved information, advice and guidance can also play important roles. Recognition of the multiple forms of TVET should not equate to some learners remaining marginalized in poor-quality TVET with no motivating, realistic possibilities of either progression through education and training or transition to decent work with further opportunities to learn. The task for policy-makers and stakeholders is to engage seriously with a wide range of policy options in order to create TVET learning opportunities that are worthwhile and attractive in the eyes of learners, employers and the wider society.

In many countries, opening up access to work-based learning for workers who have relatively low-status jobs and few formal qualifications is a particular challenge, as is access to training for women who are traditionally marginalized in the labour market, and for the huge numbers of young people who lack foundations skills or have completed basic education and yet have few prospects of decent work.

### **2.3.3 Improving the image and quality of TVET**

Attempts both to establish more coherent approaches to lifelong learning and to centre the focus of policy development on the learner are trends which are helping to refocus and reconceptualize TVET policies. An important part of this refocusing has been a greater emphasis on outcomes in terms of the knowledge and competences that learners acquire, and on the efficiency and effectiveness of institutions and training providers. Improving the quality and the image of TVET involves at least three aspects. The first is improving teaching and learning processes; the second, facilitating progression to further learning; and the third, improving the labour market outcomes of TVET.

Efforts are needed to enhance quality across the various types of TVET and in the multiple settings where TVET learning takes place. Quality refers equally to the contributions of TVET to individuals and wider education and sustainable development agendas.

### **2.3.4 Financing TVET**

Given the level of demand for skills development, the likely increase of student enrolments in TVET and the expected impact on public budget and private spending, funding is an important challenge for governments and other stakeholders including donors. At least two sets of policy issues need to be addressed. First, the ways to ensure adequate funding across all TVET settings and across the life cycle of different target groups should be explored. Second, the role of governments and other stakeholders and beneficiaries should be examined.

For developing and transition countries, there are now new and significant financial implications of transforming TVET and expanding TVET learning opportunities which governments, donors and other stakeholders need to take into account.

### **2.3.5 Strengthening innovation and research**

A growing expectation is that as well as being responsive, TVET should be innovative. TVET is not always fully engaged with major technological, labour market and social changes. Increasingly, the challenge for TVET is not only to respond to external and changing expectations, but also to take on a more autonomous and leading role in helping to shape change and adaptation to new circumstances, including providing skills needed for changing labour markets, and in identifying ways to reach and train previously marginalized or disadvantaged groups.

Transforming TVET also calls for improved knowledge and information. Yet, as noted from the analysis of TVET policy areas above, in many countries and internationally there is limited availability of TVET data and

research, and management information systems for TVET are not always in place. Even getting basic TVET data and ensuring their accuracy is beyond the capacity of some systems, and the abilities to disaggregate for target groups, to compare public and private TVET provision or to do any forecasting are beyond the horizon for several countries. Yet, for national systems, such data are vital if policy-making is to become more evidence-based.

### 2.3.6 Advancing sustainable development

Because TVET is to some extent implicated in the production, consumption and transformation of resources, there are multiple intersections with sustainable development issues. TVET is expected to take on a catalytic role in addressing urgent sustainability challenges such energy, water and food security and climate change mitigation and adaptation. TVET is also increasingly challenged by the impact of green economy activities and technologies on the demand for skills related to changing occupational requirements and the development of new and emerging occupations.

However, imparting technical skills for specific 'green jobs' needs to be complemented by developing the mindsets, generic attributes and cross-cutting skills that form the foundations of responsible eco-citizenship from a holistic perspective.

TVET needs to be transformed to better assist learners to develop their capacities to create, engage in, and commit to options that put our societies on more sustainable pathways. To succeed, a massive and innovative effort is required at all levels to revise existing qualification standards, TVET curricula, programmes, teacher training, and the teaching and learning environment.

## 2.4 Advancing the frontiers: TVET beyond 2015

When taking the long-term transformation and expansion of TVET into account, the review of international experiences and analysis of the policy areas has helped to identify aspects of TVET reform that may constitute major issues for the global debate on the future of TVET.

*Revising the scope and conceptualization of TVET:* the concept of TVET is likely to be refined and broadened, so that there is a stronger focus on key competencies in addition to occupation-specific competencies, and so that TVET is widely understood to encompass formal, non-formal and informal learning in multiple settings.

*Coping with uncertainties and building resilience:* the current global economic climate and environmental concerns as well as major challenges arising from political and social change mean that TVET policies and plans will require both the flexibility to adapt to different scenarios and the resilience to cope with unforeseen events.

*Addressing the lifelong possibilities of TVET:* post-2015, TVET can be expected to play an important role in meeting the specific lifelong learning needs of different age groups.

*Building TVET responsiveness to new approaches to development:* formal TVET has been closely tied historically to the process of industrialization and economic development. TVET policies have often been dominated by an economic and equity perspectives. Recent years, however, have seen the rise of concerns for equal opportunities, well-being and sustainable development, to which TVET needs to respond.

*Enhancing formal, non-formal and informal TVET learning:* this calls for innovative approaches to teaching and learning, including the professional development of teachers, trainers and mentors.

*Placing the learner at the centre:* a current ambition across most forms of education and training is to place the learner at the centre of the learning process. This means that as TVET learning expands, the traditional emphasis on institution-based delivery will probably decline.

*Revisiting public TVET policy:* planning for TVET in the future has implications for the thinking, networks and activities of policy-makers and practitioners related to TVET. The key agenda for the TVET policy community becomes transforming and expanding learning opportunities for skills development through TVET.

*Enhancing multi-stakeholder partnerships through new approaches to governance:* a multi-stakeholder approach to governance will mean that governments are open to participatory approaches and new forms of partnership with a wider range of partners.

*Sustainability and greening TVET:* there is a strong case for making TVET a site of learning and innovation about environmental sustainability, both with respect to its importance for the workplace and as part of a wider commitment by TVET to citizenship education, peace and security.

*Strengthening the TVET knowledge base, including skills forecasting:* although there has been a general shift towards building a more robust knowledge base for policy-making, this remains underdeveloped in the area of TVET.

# Partnerships for Transforming TVET

PART 3



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## Partnerships for Transforming TVET

**Part 3 suggests that transforming TVET requires national ownership that is driven by broad partnerships. While partnerships at the national level are considered to have a central role in the future transformation and expansion of TVET, the UNESCO study also calls for strengthened partnerships and cooperation at regional and international levels.**

While policy capacity is important, the future appears to be in the broader social distribution of ownership of TVET development strategies. The focus in much of the TVET policy discourse has been on the state building partnerships with employers and especially the private sector. This clearly is important, and must take into account that the private sector itself is diverse, consisting of numerous profit and non-profit organizations ranging widely in size, location, and economic and social interests.

Effective TVET policies also require that attention be paid to building the knowledge base for TVET policy-making. This means organizing collaborative and shared experiences among different stakeholders: policy-makers, social partners and civil society. The TVET knowledge base also needs three important elements: a strong evidence base that includes systematic data collection and analysis supported by management information systems for both TVET and labour markets; monitoring and evaluation evidence on the impacts of TVET programmes and policies; and strengthened capacities for analysis, encompassing both policy research and more academic work.

Regional and international organizations have an important role to play in supporting national processes and cross-country dialogue in the field of TVET. UNESCO, the ILO, the Organisation for Economic Co-operation and Development (OECD), the European Training Foundation (ETF), and the World Bank, along with others, are working together through the Interagency Group on Technical and Vocational Education and Training. The Interagency Group aims to improve communication and coherence among the key international organizations working on TVET and skills development.

In 2009, UNESCO, acting in close consultation and cooperation with a broad range of partners including specialized United Nations agencies, developed a strategy with three core areas of action to support the development of TVET in Member States over three biennia (2010 - 2015).

Within the first core area of the Strategy for TVET, UNESCO develops capacity and provides policy advice and support in collaboration with TVET specialists and policy-makers. The second core area of UNESCO's Strategy for TVET involves supporting conceptual clarification, standard setting, and the improved monitoring and evaluation of TVET. Within the third core area of the strategy, UNESCO seeks to be a laboratory of ideas and a clearing house in the field of TVET. The Organization actively supports the gathering and dissemination of policy and reform experiences to further facilitate the global debate. The UNESCO-UNEVOC International Centre, through its publications, virtual platform and wide network of UNEVOC centres, has a strategic role in promoting knowledge-sharing and peer-learning on TVET, at the regional and global levels. TVET policy reviews, interagency cooperation, the Third International Congress on TVET in Shanghai and subsequent follow-up activities exemplify how UNESCO facilitates international cooperation.





# CONCLUSION



# CONCLUSION

This document discusses contemporary development trends with implications for TVET. It develops an analytical approach using economic, equity and transformative 'lenses', and analyses ten key TVET policy areas derived from a review of international experiences. For each policy area key challenges are identified and some of the policy options used since 1999 are described, together with some limitations.

While economic and equity perspectives are still valid, a transformative perspective now seems essential for TVET to move from mainly addressing the short-term needs of certain groups to addressing the long-term skills needs of all young people and adults and subsequent generations. The transformative perspective can help in the design of context-sensitive policy measures.

Individuals in tomorrow's societies and economies are entitled to be prepared for change, to benefit equitably from TVET learning and to have this learning recognized by others. This is a moment of opportunity to redefine TVET's purposes and scope and future directions. Enhanced dialogue between all partners in a spirit of trust and openness can lead to strengthened networks, new partnerships and cooperation at all levels.

Participants in the Third International Congress on TVET will help to envisage how TVET can best respond to contemporary development trends and persistent challenges, and advance future frontiers. With strong political commitment and financial support TVET learning can be transformed and expanded so that all young people and adults, now and in the future, can benefit from skills for work and life.

# Transforming Technical and Vocational Education and Training

## Building skills for work and life

In the current international context of profound social inequalities, high youth unemployment and economic uncertainties, technical and vocational education and training (TVET) is a top political priority. TVET is expected to address multiple social and economic development needs. Young people themselves are calling for learning to be more relevant to work and life. Yet, developing responsive TVET and facilitating learning and skills progression by more young people and adults are major challenges. The time has come to take stock of major developments and trends in TVET and to advance conceptual and policy debates.

This is the main working document for the Third International Congress on TVET, *Transforming TVET: Building skills for work and life*, in Shanghai, People's Republic of China, 13–16 May 2012. This document is based on the preliminary findings of a UNESCO study on world trends and issues in TVET conducted as part of UNESCO's Strategy for TVET (2010–2015).

The UNESCO study examines evidence of TVET policies and programmes from a range of countries in all world regions. It promotes the use of more integrated and development sensitive approaches that consider country specific challenges. The study argues for increased attention to the interactions between policies on TVET, labour market, education and the environment, and other related policies, that can collectively support equitable and sustainable development.

This study identifies persistent challenges and seeks to advance frontiers of TVET that go beyond simply transferring or scaling-up established models and systems. The study concludes that new forms of partnership and policy dialogue are needed at all levels to simultaneously transform and expand TVET learning.



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