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Tackling Youth Unemployment through TVET

Report of the UNESCO-UNEVOC
online conference

25 June to 9 July 2013

Moderated by Gita Subrahmanyam

Co-moderated by Katerina Ananiadou



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Foreword

Quality Technical and Vocational Education and Training (TVET) is widely recognized as having an important role to play in tackling youth unemployment. TVET's orientation towards the world of work and the acquisition of employability skills means that it is well placed to address issues such as skills mismatch that have impeded smooth school-to-work transitions for many young people. In the words of UNESCO's Director-General Irina Bokova: *"We are witnessing a young generation frustrated by the chronic mismatch between skills and work. The best answer to the economic downturn and youth unemployment is to ensure that young people acquire the basic skills and relevant training they need to enter the world of work with confidence."* UNESCO-UNEVOC has made the topic of youth and skills, and particularly school-to-work transition and entrepreneurship education, one of its key thematic priorities for 2013-2014. To address the role of TVET in tackling youth unemployment, UNESCO-UNEVOC organized a virtual conference from 25 June to 9 July 2013 on the UNEVOC e-Forum.

The 2-week discussion was moderated by Dr Gita Subrahmanyam, Research Associate with the London School of Economics Public Policy Group and a Senior Consultant at the African Development Bank, and co-moderated by Katerina Ananiadou, Programme Specialist at UNESCO-UNEVOC and focal point for UNEVOC's youth-related activities. The virtual conference attracted over 300 participants from 80 countries and aimed at collecting knowledge, experiences, innovative ideas and promising practices in TVET which aim specifically at tackling youth unemployment.

Participants concluded that TVET institutions will not only need to undergo a major transformation by engaging the private sector and deepening their understanding of labour market demands, they should expand their offer of career guidance and *on-the-job* and soft skills training, and build local, national and international partnerships.

The UNEVOC e-Forum was established in 2003 to facilitate knowledge exchange and has since become a global online community of more than 3000 TVET experts taking part in crucial discussions on TVET-related issues. To further promote focused debates on crucial themes in TVET, UNESCO-UNEVOC introduced the first moderator-driven e-Forum discussion in 2011. Through these discussions, UNESCO-UNEVOC aims to enhance awareness and encourage wider debate and understanding, including the sharing of on-going practices and the formulation of new ideas in the field of strategy and policy development. Guided by an expert in the field, the discussions seek experiences, expertise and feedback and wish to inspire people to take further action.

We would like to thank Dr Gita Subrahmanyam for sharing her expertise and enthusiasm. A special mention goes to George Karachalios, who is part of the 'youth' cohort and developed the introduction video for this virtual conference. We furthermore extend our sincere gratitude to all participants who shared their experiences on the topic and contributed to the development of this report.

Shyamal Majumdar
Head of UNESCO-UNEVOC International Centre

Introduction

The world is currently facing a youth employment crisis. Despite sizeable gains in educational access and attainment across the world over the past decade, young people aged 15–24 are now three times more likely than adults to be unemployed (ILO, 2012). In some regions – notably the Middle East and North Africa – more than 26% of young people could not find jobs in 2011, and in several countries – Greece, Spain and the Former Yugoslav Republic of Macedonia – the youth unemployment rate now exceeds 50%. Unemployment figures in many cases underestimate the full scale of the problem, since there are issues of disengagement and discouragement associated with a lack of decent employment opportunities. For example, it is estimated that the youth unemployment rate in Ireland would have reached 47% in 2010 – that is, 19 percentage points higher than the official rate – if young people who were 'hiding out' in the education system or idly waiting at home for job prospects to improve had instead spent their time actively seeking work (ILO, 2012: 8–9).

One of the main reasons for high youth unemployment across the world is a growing mismatch between the supply and demand for skills, which disproportionately affects young people in developing countries. The specific nature of the skills mismatch varies by country, but in each case there is a need for rebalancing:

- In some countries, there is an excess supply of skilled workers but a shortage of skilled jobs. In Egypt, slow economic growth has meant that not enough jobs are being generated to employ the 750,000 new entrants to the labour market each year, including 200,000 university graduates (Tashima, 2013). As a result, 70% of Egypt's unemployed are between 15 and 29 years of age, and 60% have a university degree.
- In other countries, there are skills shortages in some sectors but high unemployment in others. Across sub-Saharan Africa,

there is an oversupply of social science and business graduates but a low number of graduates able to fill high vacancies in agri-business or engineering (African Economic Outlook, 2012).

- In some countries, young people – even those with higher levels of education – lack the cognitive, non-cognitive and technical skills that employers demand and therefore do not get hired. A recent survey across nine countries (Brazil, Germany, India, Mexico, Morocco, Turkey, Saudi Arabia, the United Kingdom, and the United States) found that 57% of employers had difficulties finding sufficiently skilled workers to fill entry-level positions at their firm (Mourshed et al, 2013: 11). As a result, midsize firms (between 50 to 500 employees) had an average of 13 unfilled entry-level vacancies, while large firms had 27 (ibid, p. 44).
- In other countries, skilled young workers remain wilfully unemployed in the hope of obtaining jobs in the shrinking public sector. In Tunisia, university graduates remain unemployed for an average of 28 months as they 'queue' for government positions (Stampini and Verdier-Chouchane, 2011: 13).
- In many countries, young people lack basic foundational skills and therefore have difficulties finding decent jobs or becoming self-employed. These issues often affect rural youth and young women more than other groups (ILO, 2012). In 23 sub-Saharan African countries, at least half of young people aged 15–19 lack basic literacy and numeracy skills because they never attended school or dropped out early (UNESCO, 2012: 179). In OECD countries, unemployment among young people who have not completed secondary school is nearly twice as high as among those with tertiary degrees (Scarpetta and Sonnet, 2012: 8).

Skills-related and other barriers limit the contribution that young people can make and leads to their economic and social marginalization. Since young people comprise a large and growing proportion of the world's



working-age population, their employment prospects affect future economic growth, both in their countries and globally.

Technical and vocational education and training (TVET) is increasingly being viewed as a potential solution to the youth employment crisis. TVET's orientation towards the world of work and the acquisition of employable skills means that it is well placed to overcome the skills mismatch issues that have impeded smooth education-to-employment transitions for many young people. Recent evidence suggests that TVET yields higher returns than either general secondary or tertiary education, mainly because its focus is on providing work-relevant skills (Kuepie et al, 2009: 505; Herschbach, 2009: 947). Countries with embedded systems of vocational training and apprenticeships, such as Austria and Germany, have been successful in maintaining low youth unemployment

rates (Biavaschi et al, 2012: 12). This would explain the current global trend towards expanding TVET provision and incorporating TVET into general education curricula.

However, to have a significant impact on youth employment outcomes in an era of rapid technological change and globalization, TVET institutions will need to undergo a major transformation. They will need to: keep up to date with labour market analyses and skills forecasts to ensure that their services are forward-looking and pertinent; form closer links with the private sector and other key partners to access support for their programmes and improve the relevance of their offerings; extend their coverage to a wider pool of beneficiaries, particularly rural youth and young women, who tend to be more affected by unemployment; expand their programmes to incorporate elements known to increase the employability of youth;

and upgrade their internal structures and processes to support these multiple objectives.

The design and implementation of specific youth-focused TVET programmes will ultimately be determined by knowledge of 'what works'. Unfortunately, there is currently little evidence-based research and data on the effectiveness of past interventions in getting young people into work. For example, a review of the World Bank's Youth Employment Inventory showed that only 60% of active labour market programmes targeting youth were subject to any kind of evaluation, and less than 10% were evaluated rigorously with attention to net impact and cost-effectiveness (Betcherman et al, 2007: 2). Developing countries, which tend to have the worst youth employment outcomes, were also the least likely to evaluate their programmes. Therefore, a stronger evidence base is needed to guide future TVET policy.

Scope and objectives of the virtual conference

The objective of the two-week e-Forum on 'Tackling Youth Unemployment through TVET' was to gather knowledge, experience, research and ideas on 'what works' in youth-focused TVET and what steps TVET institutions need to take to increase their effectiveness in promoting youth employment. Between 25 June and 9 July 2013, over 300 participants from 80 countries virtually attended the online conference. In addition, 22 e-Forum members from 17 countries took part in a live WebEx session held to showcase initiatives that had emerged as promising during the first week of the virtual conference.

The online discussion covered seven main topic areas, which are summarized in the next section:

1. Key barriers that young people face in finding work
2. What TVET institutions can do to ease the school-to-work transition
3. Labour market information and skills forecasting
4. Entrepreneurship education
5. Widening access: engaging disadvantaged and marginalized groups
6. Upgrading TVET's image: challenges and opportunities
7. Monitoring and evaluation of youth-focused TVET

The moderators would like to thank e-Forum members for their active participation and for generously sharing their experiences, ideas and innovations. This report summarizes the main findings and promising practices that emerged during the virtual conference, and concludes with a synthesis of participant contributions into a series of action points to assist TVET institutions in increasing their effectiveness in tackling youth unemployment. We hope you find it useful.

1. Summary of discussions



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a) Key barriers that young people face in finding work

During the first two days of the e-Forum, over 20% of active contributors identified themselves as 'youth'. So the moderators asked them to describe their experiences – or those of their peers or family members – of the difficulties and impediments that young people face in finding work. The personal accounts that participants shared highlighted two main problems: skills mismatches and lack of job opportunities. Some older e-Forum members suggested steps that young people can take when confronted with difficulties in securing jobs.

Skills mismatches

Young participants reported three types of skills mismatches preventing smooth school-to-work transitions: lack of relevant skills, lack of information about the labour market and lack of work experience.

- **Lack of relevant skills:** The young participants told the forum that young people often have difficulties finding jobs because they lack the skills that employers demand. They complained that many young people leave school without practical skills. One recent university graduate from the Netherlands told us: *'[D]uring my final year of studies... I realised that my fellow students and I*

had gained very few practical skills that would be of use to the world of work.'

- **Lack of information about the labour market:** Another issue was lack of information about the labour market. Students generally receive such information in the form of careers guidance and counselling in their schools and universities. The same Netherlands university graduate went on to say: *'Others did realise their lack of practical skills but did not really know how to go about gaining these skills ("what is it exactly that employers are looking for?")'*. She complained that: *'Too little emphasis is placed on the importance of career guidance – preparing students and young people mentally for what comes after school.'*
- **Lack of work experience:** A final problem was lack of work experience. An unemployed university graduate from Kenya told the e-Forum that, although she has *'great potential and passion in [her] area of specialisation... sadly employers look for work experience, which is sometimes so ambiguous and you end up not even getting a chance to be interviewed'*. She said that her university did not encourage students studying business and management to get jobs and work experience – and that, even on courses where work experience was mandatory, nobody checked whether these jobs were related to students' field of study. *'So you complete your studies and there is a big mismatch'*, she said.

Lack of job opportunities

Young contributors said that high youth unemployment also results from a lack of jobs and a lack of entrepreneurial skills, exacerbated by an unfavourable economic climate discouraging entrepreneurship and job creation.

- **Flooded labour market with too few jobs:** Several participants complained that too few jobs are being generated to absorb the large number of young people entering

the labour market each year and, in some cases, job shortages force young people to migrate or emigrate.¹ A TVET student from North Germany told the e-Forum: *'[T]here are not enough companies in our area... Because of that, many students move to a bigger city to start their career.'*

- **Lack of entrepreneurship skills to create new jobs:** In some cases, young people have no choice but to relocate in the face of job shortages, because they lack the entrepreneurial skills required to start their own businesses. The unemployed Kenyan graduate told the e-Forum: *'I wish I could create jobs rather than look for jobs in an already flooded market.'* Some non-youth participants also posted on the thread. A TVET lecturer from Zambia shared her experience of the youth employment problematic: *'The problem we face as the nation is that these graduates who are offloaded every year on the labour market cannot find jobs... [Yet] many of our graduates lack entrepreneurial skills to start up their own ventures.'* A similar account emerged from a TVET provider in Senegal, who said that young people in the self-employment promotion programme that she runs *'have good projects but do not know how to go about implementing them'* or *'have got the skills but do not know how to put them to use.'*
- **Inhospitable investment climate discouraging entrepreneurship and job creation:** A young participant from Cameroon shared his view that, in sub-Saharan Africa, *'[u]nfavourable economic policies do not encourage TVET training, entrepreneurship development and self-employment'* and therefore block job creation. The costs of registering a business and paying corporate taxes are

¹ It is worth noting that many developing countries are experiencing a 'youth bulge'. In 80 countries around the world, young people account for over 19% of the overall population (source: Ortiz, I. and Cummins, M. (2012) 'When the Global Crisis and Youth Bulge Collide: Double the Jobs Trouble for Youth', UNICEF Social and Economic Policy Working Paper, p. 9). This has put pressure on labour markets and is one of the prime causes of youth unemployment.

known to be high across many African countries.² This has had negative effects on entrepreneurship and economic dynamism. A young contributor from Ethiopia complained that, as a result, across Africa many young people end up being *'dependent on the government after school'* rather than becoming *'self-employed, creative and initiators.'*

Promising practices

The thread raised emotive issues, and older e-Forum members offered consolation and advice. They told the younger participants that, while they are unemployed, they should undertake CV-building activities, such as volunteering or unpaid work, to boost their practical skills and gain work experience.

- An older Kenyan gentleman told the young lady from Kenya: *'You will do well by identifying a place where you can offer services as a volunteer.'* He said that he had accumulated 'plenty of experience' as a volunteer worker in the country's informal jua kali sector, as well as in a Christian charity, before landing his current government job.
- The Netherlands university graduate told the e-Forum that, unable to find work after graduating, she carried out field research in Ghana on TVET students' career expectations and aspirations. Her career detour not only showed her that Ghanaian TVET students face similar issues to university graduates from the Netherlands; she also gained valuable skills and experience.

Young people can also upgrade their skills in formal or informal learning environments to make themselves more employable. However, to do this effectively, they require reliable information about the skills that employers seek or will require in future.

² Loeprick, J. (2009) 'Small Business Taxation: Reform to encourage formality and firm growth', World Bank Group Investment Climate In Practice Note Series, no. 1, February 2009.



b) What TVET institutions can do to ease the school-to-work transition

The e-Forum then turned to the topic of what TVET providers can do to overcome obstacles to youth employment and encourage smoother education-to-employment transitions. Perhaps unsurprisingly, the comments received on this thread formed a perfect match with the previous thread on the barriers to youth employment. Contributors to the e-Forum said that TVET institutions can ease the school-to-work transition by adopting measures that minimize skills mismatches and create job opportunities.

Minimize skills mismatches

Participants said that TVET institutions can minimize or prevent skills mismatches by focusing on providing relevant, high-quality skills and suggested several ways to achieve this goal:

- **Involve private sector partners in the design and delivery of TVET.** E-Forum members view partnerships as vital for increasing TVET's success rate in promoting youth employment. They argued that TVET institutions should strengthen links, not only with private sector employers, but also with a wider set of partners, including parents, community groups and youth groups, and that these groups should be involved in TVET design and implementation. One contributor emphasized the importance of including representatives from the informal sector



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in TVET policy, on the basis that, in some countries, the informal sector provides more job opportunities than the formal sector.

- **Offer on-the-job training, 'soft skills' training and career guidance.** E-Forum members were unanimous in regarding on-the-job training (OJT) as an integral aspect of vocational training. Contributors emphasized the importance of including OJT as a substantial component (at least 12 months in duration) of TVET programmes, ensuring that students are supervised by trained mentors within companies, and having schools and private sector partners co-develop training plans to secure a tighter fit with students' subject areas. Some participants argued that OJT should be offered to students at an earlier stage – that is, prior to post-secondary level. An e-Forum member from Finland said that her country is unique in providing OJT to 16-year-olds at higher secondary level, on the basis that *'the earlier students start interacting with the real world, the better'*. A TVET consultant from Manila said that he had tried – but failed – to secure implementation of OJT for 16–18 year olds in the Philippines. E-Forum contributors also advocated the inclusion of training in soft skills – for example, critical thinking, problem solving and other transferrable skills – in the TVET curriculum, to boost graduates' employability and help them to better adapt to changes in the economic environment. Additionally, they highlighted the importance of offering students career

guidance and counselling regularly and from an early age, to provide them with information about the labour market and to help them to make suitable career choices.

- **Recognize and accredit skills and experience gained outside of school.** Finally, contributors to the e-Forum felt that young people's employability would be enhanced if TVET institutions were to recognize and accredit the professional competences and experience that students acquire outside of the formal education system (for example, through volunteering, unpaid work and/or self-taught skills development).

Create job opportunities

E-Forum members recognized that TVET institutions can play a role in creating jobs by offering entrepreneurship education to encourage and support self-employment.³ They also advocated TVET institutions taking the initiative by building local, national and international partnerships to promote work opportunities for students.

Promising practices

Three promising practices for smoothing education-to-employment transitions emerged from the e-Forum discussions.

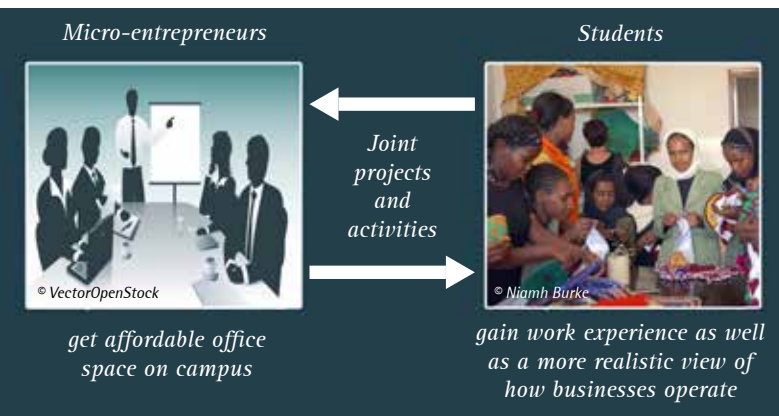
- The first came from Omnia, an upper secondary TVET provider in Finland.⁴ Omnia has recently redesigned its facilities to incorporate working life on campus (see Figure 1). The revamped campus design applies the traditional incubator idea to TVET. Omnia offers affordable office space to micro-entrepreneurs (mainly from the service sector) in exchange for their involvement in school projects and activities. The new arrangement also promotes student participation in the firms' business activities. Omnia's 'TVET

³ A summary of the e-Forum discussion on 'entrepreneurship education' will be presented later in this report.

⁴ Finland's youth unemployment rate is 20% – higher than the OECD average of 16.5% (Source: OECD StatExtract database).

incubator' represents a win-win model for all parties: micro-entrepreneurs receive support for their commercial ventures, while Omnia students gain valuable work experience as well as a more realistic view of how businesses operate.

Figure 1: Omnia's revamped campus design



- Nigeria's new National Vocational Qualifications Framework (NVQF), approved in April 2013, offers another interesting model.⁵ The system was designed through public-private partnership: a number of industries were involved in developing the national occupational standards⁶ and work-based verification, as well as the continuous assessment of trainees. Nigeria's NVQF prioritises flexibility and quality: skills and vocations outside of school system are recognized, enabling skills development to take place either within or outside of school; six levels of progression allow TVET candidates to advance from lowest to highest levels; and specially-trained internal assessors and verifiers uphold quality standards.
- A participant from Kerala, India offered a third promising practice pertaining to careers advice and educational planning.⁷

⁵ The unemployment rate among young people aged 15-24 in Nigeria was 38% in 2011 (Source: African Economic Outlook, 2012).

⁶ ILO standards were applied in the classification of occupational standards

⁷ Kerala State has one of the highest youth unemployment rates in India, averaging 42.1% in rural areas and 41.8% in urban areas in 2004/5. Unemployment among educated youth is a particularly intransigent issue. [Sources: Prakash, B.A. and Abraham, M.P. (2008) 'Trends and Characteristics of

Career guidance and counselling programmes at his higher secondary school had faced capacity constraints due to the large number of students wishing to access these services. To boost capacity, the school introduced a new pilot called Project SMART (Study Materials Accessed or Readily Transferred), which enables wider access to services through use of ICT. Project SMART works as an edu-kiosk: students can access and store digital information regarding their courses, prospects, skills acquisition, scholarships and training programmes, as well as any learning materials.

c) Labour market information and skills forecasting

To deliver training that is relevant and up-to-date, and to provide accurate career guidance to students, TVET providers require accurate labour market information (LMI). This was the subject of the third thread introduced in the virtual conference.

Key challenges

Participants highlighted some of the challenges TVET institutions face in gathering reliable LMI:

- They often have limited funds, equipment and personnel, thus need to depend on government agencies or their central TVET authority to provide them with this data.
- LMI may be unavailable, out of date or inaccurate – for example, because governments lack the political will to collect it, because a large informal sector evades measurement, or because information sources are unwilling to share data. In such cases, TVET institutions need to find other ways to get information about the global (and local) market for skills.

Cost-effective methods

Unemployment in India', in Prakash, B.A. (ed) The Indian Economy since 1991 (New Delhi: Dorling Kindersley), p. 101; and 'Unemployment level in State 9.9 percent', The New Indian Express, 15 March 2013, 12:14pm.]

Contributors to the e-Forum suggested some simple, cost-effective ways that TVET providers can gather LMI, including:

- Collating data from external websites and publications;
- Entering skills competitions, like WorldSkills, which provides information about the global skills market, as well as institutions' and students' placement within it;
- Examining broad social and economic trends signalling future growth in jobs or skills needs;
- Periodically analysing classified job advertisements; and
- Conducting surveys or interviews with business owners and HR professionals.

However, they were also aware that TVET institutions may still face problems in obtaining LMI - for example, because business owners and HR managers are unwilling to participate in surveys or interviews, since they feel it takes time away from their core business.

Promising practices

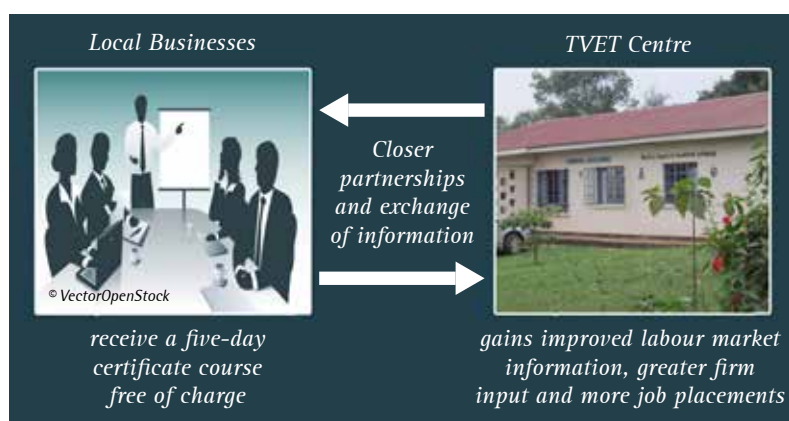
An e-Forum member from the Philippines suggested a way to overcome this information asymmetry problem: TVET institutions should provide incentives to businesses to share their information.⁸ He said that TVET providers can do this fairly cheaply by offering services that they already provide - a strategy that can yield high benefits for both parties.

He told the e-Forum that, in 1988, his former TVET centre began offering a free 5-day certificate course - the Trainers' Training Programme - to local companies, allowing them to gain a valuable qualification free of charge (see Figure 2). Because businesses do not pay for the course, their take-up rate has been high. Offering the course has improved the centre's access to LMI: many firms now

⁸ Youth unemployment in the Philippines has dropped from 18.6% in April 2008 to 16% in early 2012 (Source: ILO on rappler.com - see <http://www.rappler.com/business/28586-unemployed-youth-ph-ilo>).

share their immediate and future manpower requirements with the centre. Moreover, the course has strengthened partnerships between the TVET centre and local firms, leading to project tie-ups - for example, greater company involvement in curriculum design and training needs analysis - as well as increased job placements for TVET students. The Trainers' Training Programme has been so successful that it is still running today after 25 years.

Figure 2: Trainers' Training Programme



Entrepreneurship education (EE) was the subject of the fourth thread introduced on the e-Forum. Contributors recognized EE's role in facilitating job creation through promoting and supporting self-employment, but also acknowledged some issues affecting the success of EE programmes.

Key opportunities

Participants regard EE as a vital route for tackling youth unemployment for several reasons:

- It can create jobs for young people when there are few job vacancies - and can result in multiplier effects, since successful businesses can generate further jobs.
- It can inject innovation and dynamism into an economy.
- It can provide jobs for women and other marginalized groups who find it difficult to get hired due to discrimination.

Key challenges

However, they cited some issues that need to be addressed before EE can yield its full benefits:

- Although entrepreneurship education has been offered in the USA for more than fifty years and in Europe for the past ten years, it is still not offered in many countries – mainly because of a lack of knowledge of how to teach it or a perception that it cannot be taught.⁹ One e-Forum member complained that his country, Cameroon, has been slow in adopting EE, despite his organization's advocacy efforts.
- Parents and students tend to be risk averse: they prefer stable jobs and steady incomes. So parents may not support their children's enrolment in EE programmes.
- EE programmes require sufficiently trained teachers and mentors who can support a wide range of business sectors and ideas. One e-Forum contributor remarked on the difficulty of teaching EE: *'Teaching entrepreneurship is very challenging... We need a concise guide for the teaching of entrepreneurship. Experts need to come on board and develop a curriculum on this domain.'*
- Successful outcomes in EE often depend on entrepreneurship receiving wide social support. For example, a conducive policy environment is needed to encourage new business development, and budding entrepreneurs require easy access to start-up loans. Hence, the success of EE programmes may be reliant on TVET institutions' capabilities to successfully lobby government and mobilize social support.

Programme design and implementation

Because EE is still a developing subject area,

⁹ Source: Wilson, K. (2008) 'Chapter 5: Entrepreneurship Education in Europe', in Potter, J. (ed.) *Entrepreneurship and Higher Education* (Paris: OECD Publishing), p. 4.

e-Forum members had divergent views about how it should be designed and implemented. Some felt that EE should train students in the skills required to run a business – for example, drafting a business plan, marketing and accounting. Others felt that it should cultivate an entrepreneurial spirit – for example, creativity, flexibility, risk-taking and proactivity. Participants had similarly divergent views regarding how EE should be implemented – whether it should be taught as a separate subject or instead integrated into every subject in the TVET curriculum.

Promising practices

A promising practice in EE is UNESCO Bangkok's proposal for an Entrepreneurship Education Network (or EE-Net) for the Asia and Pacific region, which will be launched at the next Entrepreneurship Education Meeting to be held in Kuala Lumpur on 10–12 December 2013.¹⁰ EE-Net will provide comprehensive support for EE, making it easier for countries and institutions to understand and implement EE programmes.

EE-Net's aims are:

- To provide a long-term vision for EE, including how to make it more relevant to youth;
- To encourage young people's engagement in EE design and delivery; and
- To compile a database containing information that institutions need to run successful EE programmes. The database will include:
 - Research on entrepreneurship education;
 - Information on innovative projects and practices; and
 - Details of successful entrepreneurs to serve as ambassadors for

¹⁰ While the youth unemployment rate for South-East Asia and the Pacific fell from 15.2% in 2007 to 13.3% in 2011, it is still higher than the global average of 12.3% (Source: ILO KILM – Key Indicators of the Labour Market).



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entrepreneurship and mentors for future (especially young) entrepreneurs.

e) Widening access: Engaging disadvantaged and marginalized groups

To increase their impact on youth employment outcomes, TVET institutions need to extend access to their programmes to disadvantaged and marginalized groups.

Key opportunities

Participants from a range of perspectives highlighted the need to expand TVET's reach to disadvantaged groups left behind by the education system, both to increase their employability and to ensure that they do not become a danger to themselves and society:

- A contributor from Jamaica argued that young men and women who leave school without basic literacy, numeracy and IT skills are at risk of getting involved in crime and violence.
- An e-Forum member from Nigeria emphasized the need to provide TVET to young offenders, to ensure that they do not return to crime once they are discharged from prison.
- Groups that participants suggested would benefit from more targeted attention and support from TVET providers include: young women, rural youth, young people working in the informal sector and youth from minority groups (such as indigenous peoples).

Key challenges

However, e-Forum members also outlined some of the challenges that governments face in widening access to TVET:

- Some young people are hard to reach – for example, youth living in remote areas or those who have commitments that prevent their school attendance (for example, young mothers). A participant from India pointed out that TVET programmes often succeed in reaching some disadvantaged groups – for example, Dalits and scheduled tribes – but not others – for example, young women and ethnic minority youth.
- TVET institutions may lack the capacity to offer their services more widely – for example, because they have too few teachers or limited space in classrooms. In such cases, stretching beyond capacity could produce a trade-off in quality and may not be worthwhile. A participant from Zambia told the e-Forum that, despite its mandate to act as a 'second chance' initiative for school dropouts, his country's TVET sector struggled for many years to fulfil this role because of capacity constraints.
- TVET providers may lack the will or foresight to extend their programmes to disadvantaged and marginalized groups. A

recent survey of 345 training programmes across 90 countries showed that less than 40% of these programmes targeted disadvantaged groups, and that some groups – women, the disabled and ethnic groups – tended to be disproportionately ignored (Fares and Puerto, 2009: 14). An e-Forum contributor from Germany remarked that countries' failure to pursue inclusive TVET policies is one of the main causes of high youth unemployment: *'Much is discussed about the importance of TVET for youth, but many countries refrain from clear structures and other incentives to reach the majority of young people, leading to a disastrous unemployment rate among people under 25.'* Non-inclusiveness may not be due to discrimination per se, but rather the result of poor targeting through use of broad criteria, which skew programme benefits towards larger or more privileged groups (Subrahmanyam, 2011: 19). One e-Forum participant noted that TVET evaluation methods are also subject to bias, since they *'tend to overlook these harder-to-reach groups and evaluate the success of initiatives and programmes without considering to what extent they have created opportunities for access to groups of people that are normally not engaged in TVET or education and training.'*

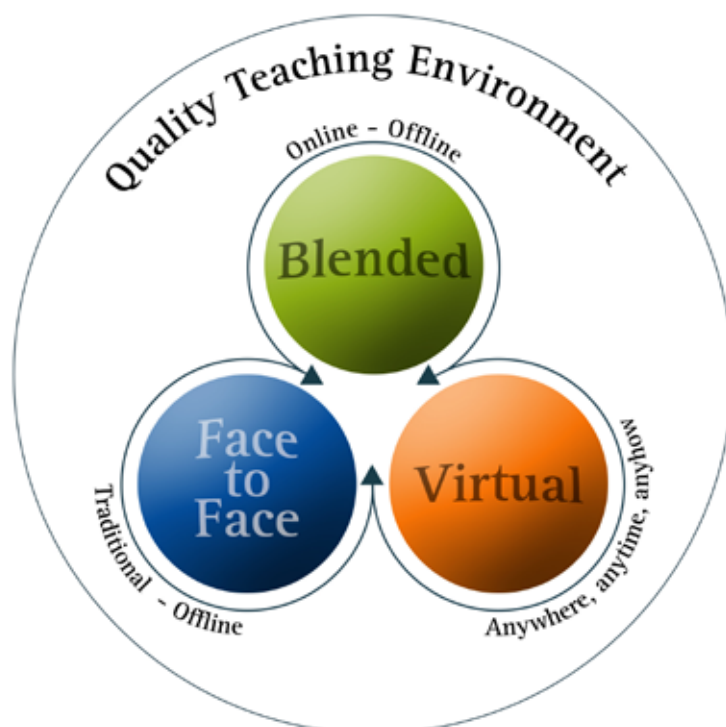
Promising practices

An e-Forum member from Zambia described how his government has helped the country to overcome TVET capacity constraints, which prevented TVET programmes from reaching the large number of young people trapped in poverty due to lack of basic skills.¹¹ It formed a partnership with the Commonwealth of Learning through a project called INVEST Africa and introduced Flexible and Blended (FaB) learning in TVET. FaB approaches combine face-to-face teaching with computer-

¹¹ Zambia is one of the poorest countries in Southern Africa. Over 80% of its 13 million people do not receive a regular income, and most of them are under the age of 35 (Source: "'Dumping place" Zambia struggles with soaring youth unemployment', Radio Netherlands Worldwide Africa, 1 June 2012, 4:46pm).

mediated activities, so that learning can take place anytime and anywhere (see Figure 3). Incorporation of ICT in TVET has opened up access to young mothers and youth living in remote areas. Moreover, Zambia's adoption of cheap technologies – for example, self-taught modules, recorders, DVDs, CDs and videos – has made TVET more affordable for poorer groups. Zambia's TVET providers have not entirely abandoned face-to-face teaching, but have instead formed alliances with colleges and businesses to establish satellite centres, where learners can physically interact with lecturers. Since the introduction of FaB learning, Zambian TVET enrolments have grown enormously. However, the country still faces some challenges: many learners do not possess computers; internet connectivity in Zambia is slow and unreliable; and some teachers are resistant to adopting new technologies. Once Zambia's government has found a way to resolve these issues, the country will be well positioned to make significant progress in tackling youth unemployment.

Figure 3: Flexible and blended learning



TVET's effectiveness in promoting youth employment will be limited so long as TVET is regarded as a 'last resort' or 'second-choice' option by parents and students. E-Forum members noted that, while the current optimism regarding TVET's potential for tackling youth unemployment has elevated TVET's status, TVET's longstanding negative image cannot be overturned unless substantive measures are taken to improve the quality of TVET programmes.

Key imperative: raise quality

Negative perceptions of TVET are related to quality issues. Many young people and parents are not attracted to TVET because they associate vocational track programmes with low academic performance, poor quality provision and blocked future pathways. A contributor from Germany pointed out that, even in her country – which is often upheld as a 'role model' of successful TVET provision – parents prefer sending their children to Gymnasium (the high school that leads to university) rather than to TVET, since they believe it will provide a better future for their children. She said that the only way to improve TVET's image is to raise the quality of programmes so that they generate positive outcomes for graduates. Since student outcomes are linked to teaching quality, TVET institutions should ensure that teachers and trainers are highly qualified and continuously update their skills. Additionally, programmes should be regularly and rigorously monitored and evaluated to assure quality, relevance and impact.

Key challenges

However, TVET quality is not determined solely by TVET institutions. Extraneous events can also affect TVET outcomes, lowering quality and contributing to negative perceptions.

- A contributor from Finland said that, in many countries, TVET institutions do not receive adequate legislative and financial



support. Hence, vocational tracks do not lead to higher education, TVET teachers are low-paid, and TVET learning environments are outdated. These issues affect the quality of TVET provision as well as its image.

- The effectiveness of TVET programmes is often reliant on 'stakeholder buy-in' – that is, on private sector firms and other key stakeholders supporting TVET processes and learning outcomes. An e-Forum member from the UK observed that TVET outcomes are dependent on *'trust and co-operation between social partners, including the willingness of... employers to be bound by significant regulation when it comes to training'*. Lack of 'buy-in' by partners – for example, companies' failure to uphold high standards in their provision of on-the-job training – will affect the quality of training as well as student outcomes.
- The economic environment also plays a role in TVET outcomes. For example, during

economic downturns, when firms are struggling to avoid laying off workers, TVET graduates may have difficulties securing jobs and TVET institutions may be unable to generate sufficient apprenticeships and training places for their students. These issues will affect TVET's image. According to one contributor, Germany was in such a position ten years ago.

Suggested actions

Nevertheless, TVET institutions can adopt measures to improve the quality of provision and TVET's image. E-Forum participants suggested the following actions:

- **Ensure TVET is not a dead end.** TVET providers should lobby governments for a change in legislation, so that TVET tracks lead to university. If that is not possible, then they should initiate a separate TVET track for further studies, where students can gain higher specialist qualifications to improve their employability.
- **Persuade policy makers to increase TVET funding.** TVET institutions should petition for funding on an equivalent basis to general education institutions. After all, up-to-date learning environments, reasonable salaries for teachers and possibilities for professional development will go a long way towards raising TVET quality – and its image.
- **Stimulate involvement of companies and other key stakeholders.** TVET institutions should encourage companies and other key stakeholders to cooperate in TVET planning and processes, including curriculum design, training and mentoring. One way to do this would be to strongly publicize the benefits of TVET for industry – for example, access to well-qualified and work-ready employees in the future.
- **Take steps to raise teaching quality.** TVET providers should adopt measures to raise teaching quality – for example, by increasing the qualifications levels required by TVET teachers and making pedagogical training obligatory. TVET's image will not improve if teaching quality remains low.

- **Ensure graduates are job-ready and motivated.** TVET institutions should take steps to improve students' 'hard' and 'soft' skills. This can be achieved by integrating on-the-job training, lifelong learning and entrepreneurial thinking into the TVET curriculum.

- **Publicize the benefits of TVET to parents.** TVET's negative image is partly the result of lack of information. A contributor from Germany argued that: *'young people's parents should be informed about the benefits of TVET as well. Many parents don't really know how their children could benefit from TVET, thus discouraging their children to make that choice when planning their further career.'* She suggested that TVET providers should promote their services to parents by highlighting TVET's benefits. This can be accomplished via publicity campaigns, dissemination of research on TVET, arranging parent visits and showcasing student achievements.

Promising practices

A promising practice for upgrading TVET's status emerged from Finland – a country that has been systematically working to improve the image of TVET over the past ten years.

The country's efforts have paid off. Today:

- Over 50% of Finnish youth apply to TVET programmes.
- Parents no longer object to TVET as a first choice option, since students can complete the year-12 matriculation exam in the TVET track and have equal access to higher education.
- TVET programmes are more competitive than general education programmes. This spring, 70% of applications to the TVET track were successful, as against 94% to the general education track.

Finland's success is based on the following features:



- **Equivalence to general education institutions:** In Finland, both TVET and general education tracks provide equal access to further studies at university level or applied sciences level. TVET institutions also benefit from generous basic and developmental funding on an equivalent basis to general education institutions.
- **Focus on employable skills:** Finland's TVET curriculum emphasizes real-world competences and lifelong learning.
- **Public promotion of TVET:** TVET schools across Finland promote their services to parents by arranging visits and parents' evenings on a regular basis.

g) Monitoring and evaluation of youth-focused TVET programmes

The final thread was on the monitoring and evaluation of TVET programmes. TVET institutions can enjoy two key benefits if they carry out regular and rigorous monitoring and evaluation: (1) they can assess – and therefore maintain or raise – the quality and impact of their programmes; and (2) they can gather evidence of 'what works' in terms of getting young people into work.

Key challenges

However, TVET institutions seldom realize these benefits, because most do not regularly or rigorously monitor and evaluate their programmes. A recent study of 345 training programmes across 90 countries showed that only one-third of programmes were subject to any kind of evaluation and only 9% were rigorously evaluated, with calculations of net impact and cost-

effectiveness (Fares and Puerto, 2009).

Moreover, the e-Forum discussions suggest that TVET providers and others are not particularly interested in the subject of monitoring and evaluation. It was the least discussed topic during the online conference, with only one contributor responding to the thread on monitoring and evaluation and very few others addressing the subject in their comments on other threads. Of course, it is possible that the weak evidence base on 'what works' in youth-focused TVET has deterred some people from engaging in the topic. But, if that is the case, then efforts need to be made to strengthen the body of evidence.

Commonly used methods

What is perhaps more worrying is that the monitoring and evaluation methods most commonly used by e-Forum members are not rigorous. Participants said they assess their programmes by:

- Regularly tracking graduates' job status and progress; and
- Surveying employers to assess their satisfaction with graduates' skills and competences.

These measures provide no indication of net impact or cost-effectiveness and therefore skew results: '[T]he absence of rigorous evaluations may lead to an overestimation of program impacts and misguide policy decisions' (Fares and Puerto, 2009: 2).

To more realistically – and accurately – assess the impacts, quality and relevance of their programmes, TVET institutions need to adopt more 'scientific' methods. This means making use of control groups and testing for cost-effectiveness.

Suggested guidelines

One e-Forum member shared his guidelines for

evaluating in-company training programmes. His suggested approach is detailed below.

- **Student learning process:** Student learning should be measured, not only in terms of the knowledge acquired, but also in terms of students' attitudes and predispositions towards learning and solving unexpected problems.
- **In-company training process:** In-company training should be evaluated, not only in terms of whether training targets have been met, but also in terms of student satisfaction with company trainers' contributions and whether the training received forms a good fit with students' learning from other modules.
- **Degree of work insertion:** Appraisals should assess how many students the company employs after training has ended, whether these jobs are related to students' vocational profiles and how many students are still employed after a specified time period.

In sum, his guidelines allow for an assessment of the gross outcomes of in-company training, but not the net effects. His suggested approach would be strengthened if, for example, the learning and employment outcomes of students who completed training were compared against those who received no training (net impact), or if the benefits gained from in-company training were weighed against the costs of providing them (cost-effectiveness).

h) WebEx teleconference: promising practices in youth-focused TVET

During Week 2 of the e-Forum, a WebEx live teleconference was held to enable participants to interact in a more personal – and less virtual – manner, as well as to learn more about initiatives that had emerged as promising during the first week of the e-conference. 22 people from 17 countries joined the session.

Three presenters described their approaches to delivering youth-focused TVET:

- Ashley Sims, Director of Operations at the Foundation for Technical Education;
- Akanksha Gulia, Young India Fellow and Project Officer at the Skills Academy; and
- Victoria Galán Muros, Director for Communication and Marketing at the University Industry Innovation Network.

Foundation for Technical Education (FTE), Switzerland

Ashley provided some background on FTE and presented its successful education model. FTE was created to tackle the skills shortages that its founders observed took place in East Africa, where foreign workers are often flown in to do jobs that cannot be locally filled. East Africa suffers from a shortage of skilled technicians, because the region's education systems tend to focus on theory rather than practical skills – what FTE calls a 'teacher-centred approach' to training. FTE saw the need for educational reform and opened its first technical school, the Kilimanjaro International Institute for Telecommunications, Electronics & Computers (KIITEC), in Tanzania in 2003. KIITEC is based on a hands-on, student-centred education model and is the result of an international public-private partnership. The school receives financial, practical and technical support from international partners – including educational institutes, non-profit organizations, governments, foundations and private enterprises – but is managed and coordinated by local leadership teams within the school.

FTE's education model for KIITEC is based on five key principles:

1. **Focus on employable skills** – The emphasis is on hands-on training: each student learns through real-world industry simulations using modern learning technologies.
2. **Highly trained world-class teachers** – Teachers are hired locally but undergo an intensive six-month training course led by international experts.

3. **Alignment of curriculum with domestic skills needs** – Thorough technical industry needs assessments are conducted to ensure that the training curriculum is aligned with domestic labour market demands.
4. **Business management and entrepreneurial skills development** – The curriculum focuses on developing business management and entrepreneurial skills, to ensure that graduates are better-rounded and adaptable.
5. **Equal access** – Merit-based scholarships covering tuition, uniforms, learning materials and daily lunches offer educational opportunities to disadvantaged groups, especially young women, who face huge challenges entering the technical field.

In addition, FTE exercises **tight quality control** over its programmes through rigorous recruitment, written tests and performance audits.

KIITEC has been running for nearly 10 years and boasts a **high success rate**: 89% of its graduates are employed in highly skilled jobs, and 7 of its former students have succeeded in creating their own businesses. FTE plans to spread its education model across East Africa by partnering up with existing training centres.

The Skills Academy, India

The Skills Academy was founded in 2012 with the aim of linking education to employment through skills building. Akanksha provided an overview of the Skills Academy's new integrated approach to skills development, which she is helping to pilot in two large states (Rajasthan and Uttar Pradesh) in India. She explained that India has a young population – that people under 30 years of age make up 60% of the population – and there are huge skills gaps in various industrial sectors that need to be filled. The integrated approach that Skills Academy offers is based on public-private partnerships and has four key components: identification and outreach; training curriculum; training infrastructure and delivery; and job placements. Akanksha



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attributes the success of the Skills Academy's model to a **quality focus**, comprising quality training, train the trainers, choosing the right partners, and superior work placements.

University Industry Innovation Network (UIIN)

Established in 2012, UIIN aims to facilitate the exchange of knowledge and information between universities and industry. Victoria shared her knowledge and experience in linking educational institutions with external organizations (public and private, for-profit and not-for-profit), which she applied to the TVET sector.

Victoria highlighted four key ways in which TVET institutions and external organizations can cooperate to increase

students' employability and thus reduce graduate unemployment:

- **Co-developing and delivering the TVET curriculum:** The TVET curriculum should be developed together with external organizations to incorporate a practical component. Likewise, programme delivery should be partially assumed by external organizations, to ensure that seminars and workshops inspire students and bring real life into the classrooms.
- **Cultivating entrepreneurial mindsets and soft skills:** There is an urgent need to encourage entrepreneurial acting and thinking in students, regardless of whether the end goal is to help them start a business. Entrepreneurial acting and thinking can be encapsulated in three activities and attitudes: searching for opportunities; taking them; and being proactive. This should be complemented by development of soft skills – for example, communications, leadership, teamwork, and presentation skills.
- **Promoting on-the-job training:** It is essential that students of all disciplines temporarily join external organizations, so that they have direct contact with the world of work before completing their studies. External organizations benefit as well, since students can bring new and fresh ideas to businesses. However, TVET institutions need to exercise quality control to ensure that internships build on students' skills and add overall value to the educational process.
- **Collaborating in student projects activities:** TVET institutions should continually explore ways of involving external organizations in academic activities. This can be accomplished by, for example, encouraging student projects and theses to be produced in collaboration with external organizations. Joint efforts yield high benefits for all parties.

Following the presentations, the audience was invited to ask questions and share experiences. There was a lively discussion and exchange

of ideas, notwithstanding the fact that some participants lacked microphones and therefore had to use the 'chat' function on WebEx. The points that participants raised during the discussion are reflected throughout this report, as well as in the 'Lessons Learnt' section.

2. Lessons learnt



Between 25 June and 9 July 2013, over 300 people from 80 countries virtually attended the UNESCO-UNEVOC e-Forum on 'Tackling Youth Unemployment through TVET'. Around one-quarter of these participants actively contributed in the discussions, sharing their personal accounts of the difficulties that young people face in the labour market and suggesting ways that TVET institutions can assist in overcoming these barriers to ensure smoother school-to-work transitions.

Contributors told us that young people face two main impediments to employment: (1) on the supply side of labour, skills mismatches – characterised by a lack of practical skills, a lack of work experience and a lack of information about the labour market on which to base their career decisions; and (2) on the demand side, a shortage of job opportunities compounded by a lack of entrepreneurial skills to create their own jobs.

Participants unanimously agreed that TVET institutions can play a role in overcoming these obstacles. After all, TVET's orientation towards

the world of work and the acquisition of employable skills means that it is well placed to minimize the skills mismatches that have impeded smooth education-to-employment transitions for many young people. Moreover, the current optimism regarding TVET's potential for tackling youth unemployment presents TVET institutions with a major opportunity to expand their role and operations, as well as overcome negative perceptions of TVET as a 'second choice' educational option.

However, they emphasized that, to have a significant impact on youth employment outcomes in an era of rapid technical change and globalization, TVET institutions will need to undergo a major transformation. While the precise configuration may differ by country and circumstances, certain broad principles apply globally. Their recommendations are summarized below.

To become more effective in reducing skills mismatches, TVET institutions will need to:

- involve the private sector – including employers, parents and young people – in curriculum design and delivery to ensure the relevance and quality of TVET programmes;
- offer on-the-job and soft skills training to provide young people with work experience and increase their employability;
- regularly update their knowledge of the skills market to ensure that TVET offerings are up to date and relevant;
- disseminate this information to students as career guidance, at an early stage and regularly, to help them make considered choices about their future; and
- extend skills development opportunities to disadvantaged groups left behind by the education system, to increase their employability and reduce the risk of their involvement in crime and violence.

To generate job opportunities, TVET providers will need to:

- offer entrepreneurship training and

support to assist young people in creating high-quality jobs for themselves; and

- build local, national and international partnerships to promote work opportunities for their students and gain support for TVET programmes and services.

But to play a substantial role in tackling youth unemployment, TVET institutions will need to overcome negative bias against TVET by parents and students, which prevents many young people from enrolling in TVET programmes. This may be achieved by publicizing the benefits of TVET – which should not be difficult today, given the current optimism about TVET's role in getting young people into jobs – and by raising the quality of TVET programmes, which represents a longer-term strategy. Since teaching quality is a crucial determinant of overall programme quality, TVET institutions need to ensure that their teachers are highly-qualified and continuously upgrade their knowledge and skills to incorporate new technologies and work practices. They also need to regularly and rigorously monitor and evaluate their programmes to assess – and assure – quality, relevance and impact.

Taken together, these measures would vastly improve TVET's capabilities for tackling youth unemployment and would enable TVET institutions to become instruments for social change and economic dynamism. Moreover, having a range of external partners can expand the level of financial, technical and practical support for achieving these aims.

However, participants were also aware that TVET institutions may face external impediments that limit their effectiveness in promoting positive youth employment outcomes. For example:

- **Inferior legislative and/or financial status.** If governments assign lower legislative status to vocational track programmes than to general track programmes, so that TVET students cannot progress to university, then this will cement TVET's image as a 'second choice' option. Similarly, inadequate

funding can affect TVET programme quality – by, for example, putting a cap on TVET teachers' pay – and can place a constraint on TVET providers' capacity to extend their programmes to a wider set of youth.

- **Lack of stakeholder buy-in.** If stakeholders refuse to support TVET processes and outcomes – for example, if companies refuse to share their information regarding the labour market or to adhere to high standards in their provision of on-the-job training – then this will detrimentally affect TVET relevance and quality.
- **Unfavourable investment climate.** An unsupportive policy environment discouraging job creation and entrepreneurship can result in poor employment outcomes and lower perceptions of TVET quality, regardless of how well trained TVET students are.

The promising practices that e-Forum members generously shared indicated some powerful measures that TVET institutions can adopt to surmount these obstacles. TVET providers should:

- **Lobby policy makers:** to achieve equivalence with general education institutions in legislative and financial status.
- **Incorporate ICT into TVET:** to widen access to programmes through 'flexible and blended' learning approaches and to promote 21st century skills and lifelong learning, all at relatively low cost.
- **Maximize use of resources:** by offering their institutional facilities or programmes to external stakeholders at low or no cost, in exchange for stakeholders' cooperation in TVET processes and outcomes.
- **Collaborate with businesses and other key stakeholders:** to achieve mutually beneficial aims. TVET providers could, for example, engage in 'log-rolling' – where they support business lobbies for an improved investment climate, in exchange for companies' support of an elevation in

TVET's legislative and financial status. Joint politicking can strengthen partnerships and foster further cooperation.

3. Outlook and recommendations

The outlook for TVET is bright, and the current environment of optimism offers TVET providers a valuable opportunity to execute change and make a real difference, both in the lives of young people and in TVET's future role and status. Youth unemployment is a major global challenge, and TVET is increasingly being viewed as a solution to the problem because of its orientation towards the world of work and the acquisition of employable skills.

TVET institutions need to seize this moment – this opportunity – to take decisive action and expand their role and operations in response to the challenge. The growing realization by policy makers and other stakeholders of TVET's inherent value in tackling youth unemployment has created an amenable environment, where TVET providers may be able to more easily obtain the cooperation and support they need to increase their effectiveness in tackling youth unemployment. However, TVET institutions should take care not to spread their efforts too widely; they should instead concentrate on a few key areas that will produce maximum impact.

It is in this spirit that we offer six key recommendations:

- **Lobby to improve TVET's image and status.** TVET institutions should publicize the benefits of technical and vocational education and training to governments, parents and young people to make TVET a more attractive option and to gain equivalent legislative and financial treatment as general education institutions.
- **Focus on increasing young people's practical skills and employability.** The TVET curriculum should include a substantial on-the-job training component, as well as soft skills training, entrepreneurship education and career guidance.
- **Incorporate ICT into TVET content and delivery.** TVET providers should adopt 'flexible and blended' learning approaches to increase TVET capacity, widen access to programmes and services, and promote lifelong learning and 21st century skills development. Focusing ICT-based training on disadvantaged groups in remote areas or with fixed commitments can improve equity while expanding TVET's role in tackling youth unemployment.
- **Build partnerships among a wide range of stakeholders locally, nationally and internationally.** Partnerships can enable TVET institutions to increase their knowledge of the global and local skills markets, expand their capabilities, promote work opportunities for young people, and improve the quality and relevance of their programmes.
- **Insist that teachers and trainers are – and remain – highly qualified.** To raise teacher competence, TVET institutions should increase the qualifications levels required by teachers and trainers, offer training led by international experts, and encourage development work as well as continuous upgrading of skills and knowledge.
- **Gather evidence on 'what works' in TVET.** TVET providers should regularly and rigorously monitor and evaluate their programmes to ascertain quality, effectiveness and efficiency, as well as to strengthen the evidence base on 'what works' in TVET interventions aimed at tackling youth unemployment.



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Resources

Background resources

- Betcherman, G., Godfrey, M., Puerto, S., Rother, F. and Stavreska, A. (2007) A Review of Interventions to Support Young Workers: Findings of the Youth Employment Inventory (Washington DC: World Bank).
- Biavaschi, C., Eichhorst, W., Giulietti, C., Kendzia, M., Muravyev, A., Pieters, J., Rodríguez-Planas, N., Schmidl, R., and Zimmermann, K. (2012) Youth Unemployment and Vocational Training (Washington DC: World Bank).

- Fares, J. and Puerto, S. (2009) 'Towards Comprehensive Training', SP Discussion Paper No. 0924 (Washington DC: World Bank).
- Herschbach, D. (2009) 'Planning for Education and Work: Alternatives and Issues', in Maclean, R. and Wilson, D. (eds) International Handbook of Education for the Changing World of Work: Bridging Academic and Vocational Learning (Bonn: Springer).
- International Labour Organisation (2012) The Youth Employment Crisis: Highlights of the 2012 ILC Report (Geneva: ILO).
- Kuepie, M, Nordman, C. and Roubaud, F. (2009) 'Education and earnings in urban West Africa', Journal of Comparative Economics, vol. 37, pp. 491-515.
- Mourshed, M., Farrell, D. and Barton, D. (2013) Education to Employment: Designing a System that Works (Washington DC: McKinsey Centre for Government)
- Scarpetta, S. and Sonnet, A. (2012) 'Challenges Facing European Labour Markets: Is a Skill Upgrade the Appropriate Instrument?', Intereconomics, vol. 47, no. 1, pp. 1-10.
- Stampini, M. and Verdier-Chouchane, A. (2011) 'Labor Market Dynamics in Tunisia: The Issue of Youth Unemployment', African Development Bank Working Paper, no. 123 (Tunis: African Development Bank).
- Subrahmanyam, G. (2011) 'Tacking Youth Unemployment in the Maghreb', Economic Brief (Tunis: African Development Bank).
- Tashima, R. (2013) 'Jobs for Youth', Business Today Egypt, 9 January 2013.
- UNESCO (2012) Youth and skills: Putting education to work (Paris: UNESCO).

Resources and links added by participants

- *Presentation* by Ashley Sims (Foundation for Technical Education, Switzerland)
- *Presentation* by Akanksha Gulia (The Skills Academy, India)
- *Interview with Impact Creators*
- *Education for Employment* Canadian International Development Agency (CIDA)
- *TVET Project for Madrasas in The Gambia*
- *FTE Education model* Foundation for Technical Education
- *Video about Foundation for Technical Education*
- *The Relationship of Career Guidance to VET* by OECD
- *Learning for Jobs: Career guidance Pointers for policy development* (OECD)
- *Anticipation of skills professional profiles to meet future labour market needs* by Rafael Barrio Lapuente
- *Rational solution to skills shortages* by Hoosen Rasool
- *Conceptual paper on skills measurement* by Hoosen Rasool
- *Entrepreneurship Education in the Arab States* (UNESCO-UNEVOC)
- *Entrepreneurship development programmes in Nigeria*
- *Entrepreneurship education in the Nordic countries: Strategy implementation and good practices*
- *Reaching the MDGs Marginalized and Disadvantaged Girls* (UNICEF)
- *Social Exclusion: the emerging challenge in girls' education* Centre for Global Development
- *Catalogue of Professional Qualifications and the Procedures to formally assess and accredit vocational qualification* (Spain)
- *ILO report on informal economy*
- *Improving Employment Prospects for Young Workers in Spain* (OECD)

Participation

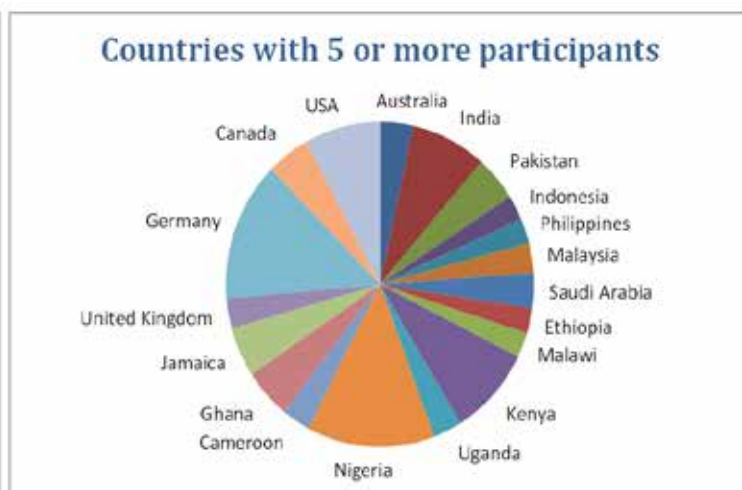
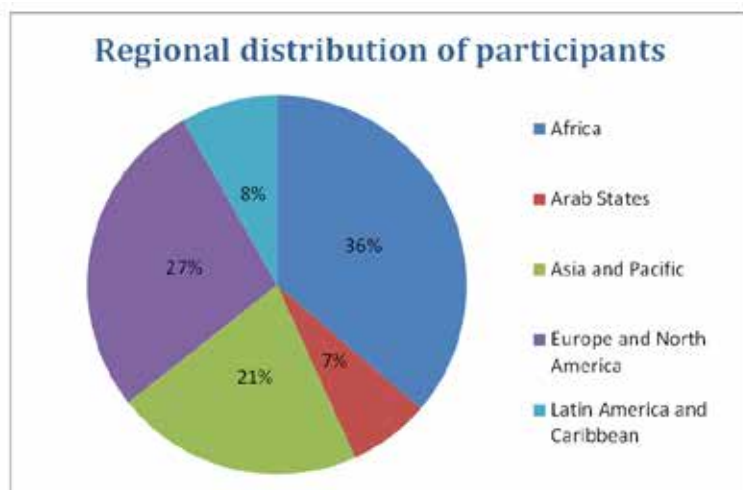
Overview

Number of participants: 303

Number of countries from which participants came: 80

Number of active contributors: 73 (24% of participants)

Number of messages exchanged: 127



List of Participants

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