What’s on the horizon? Green & digital TVET trends in Africa, Asia-Pacific and Europe

A comparative preliminary analysis on the trends in new qualifications and competencies
What’s on the horizon?
Green & digital TVET trends in Africa, Asia-Pacific and Europe

BILT Bridging Event
22 June 2022
BILT team explored the latest trends in new qualifications and competencies in TVET in the three regions

- A background research carried out in Europe in 2019, and published in 2020; and an updated review in 2022
- A literature review, questionnaire survey and stakeholder interviews were conducted in Africa and Asia in 2021

  - Identification, integration and implementation of new qualifications and competencies at national and regional levels among macro, meso and micro-level institutions
  - Effects of greening and digitalisation on TVET systems and the demand for new skills
  - Identification, integration and implementation of NQCs in digitalisation and greening skills required in the two regions

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## Geographic context: variance and similarities

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Africa</th>
<th>Asia</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographics</strong></td>
<td>• Young population and getting younger!</td>
<td>• Young and the ageing • 4.64B people of 7.96B</td>
<td>• Predominantly ageing • 4% of world’s population in 2070</td>
</tr>
<tr>
<td><strong>Economy</strong></td>
<td>• Resource-rich and growing</td>
<td>• 30% of world’s GDP</td>
<td>• Single market</td>
</tr>
<tr>
<td><strong>Unemployment</strong></td>
<td>• 15 million entrants every year against 3 million jobs</td>
<td>• 160 million youth as NEET • COVID-19 impact has been high</td>
<td>• Youth unemployment persists • More graduates in jobs</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td>• 88.5% in Informal jobs • A third underemployed</td>
<td>• 2/3rd informal employment • 1.3B of 2B workers</td>
<td>• Highly skilled workers • Skilled migrants</td>
</tr>
<tr>
<td><strong>TVET</strong></td>
<td>• Small, weak and low in status • Weak link with industries</td>
<td>• Perception among parents low • gender imbalance</td>
<td>• Fairly mainstreamed • Tertiary education required for decent jobs</td>
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Identification of
New Qualifications and Competencies
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</thead>
<tbody>
<tr>
<td>• LMIS measures formal employment</td>
<td>• Continent/region-wide LMIS is nearly impossible</td>
<td>• Europe-wide approach is emerging</td>
</tr>
<tr>
<td>• Lack of data on employment trends by occupation, sector, geography and gender</td>
<td>• Wider stakeholder involvement is required to identify new skills and competences</td>
<td>• 2020 skills agenda recognises skills intelligence</td>
</tr>
<tr>
<td>• Investments and capacity building required in skills anticipation, forecast and in labour market information systems</td>
<td>• Needs of informal sector require consideration</td>
<td>• Certain existing skills are yet to be identified and classified</td>
</tr>
<tr>
<td>• Lack of data on job market in the informal sector</td>
<td>• Governmental capacity in skills identification and forecast is to be enhanced</td>
<td>• Transversal skills, aptitudes and non-routine competencies are recognised</td>
</tr>
<tr>
<td></td>
<td>• Inter-agency government coordination with single office responsible for LMIS is desired</td>
<td>• European green deal and e-Competency framework lay foundation across the continent</td>
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Integration of New Qualifications and Competencies

Image: UNESCO-UNEVOC
### Integration of new qualifications and competencies

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</thead>
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<tr>
<td>• National Qualification Frameworks govern integration</td>
<td>• Shift in industrial focus and the developments of IR 4.0 recognise 21st Century competencies</td>
<td>• Mother tongue and foreign language competencies sit alongside ‘soft’, ‘basic’, ‘core’ skills</td>
</tr>
<tr>
<td>• Limited scope for contextualisation for local market needs</td>
<td>• While new competencies are developed as new courses, many competences are embedded in existing curricula</td>
<td>• A third of nations do not have national strategies for key skills</td>
</tr>
<tr>
<td>• Lack of formalised labour market structures impedes standardisation</td>
<td>• Top-down approach of integrating competencies excludes many stakeholders</td>
<td>• Half of the nations do not have strategies for foreign language skills</td>
</tr>
<tr>
<td>• Stakeholder involvement is required</td>
<td>• Integration processes require strengthening through institutional capacity building</td>
<td>• More awareness and training required to embed transversal competencies in current courses</td>
</tr>
<tr>
<td>• Skills recognition (continent-wide) required</td>
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Implementation of New Qualifications and Competencies

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<td>• Highly fragmented delivery structures</td>
<td>• Further investment in workshop facilities, tools, equipment, and ICT facilities</td>
<td>• Not all trainers and teachers find it easy to embrace change</td>
</tr>
<tr>
<td>• TVET teachers lack training and experience in industry</td>
<td>• Lack of institutional capacity to embrace and implement change</td>
<td>• At the same time, many teachers are willing to be co-creators of learning pathways for learners</td>
</tr>
<tr>
<td>• TVET stereotype courses make it less attractive for girls</td>
<td>• Partnership with industries circumvent financial and infrastructural constraints</td>
<td>• Teaching strategies need to adjust and so do the competencies of teachers if they are to empower 21st-century learners</td>
</tr>
<tr>
<td>• Delivery institutions are not able to report on employment outcomes of their learners</td>
<td>• Learner centred approaches preferred in experiential learning, blended learning, game-based learning, embodied learning, social learning and collaborative learning at delivery institutions, workplaces, in the community or online.</td>
<td></td>
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<td>• Need for updated pre-service training and CPD for TVET teachers and trainers</td>
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Greening of TVET and
New Qualifications and Competencies

Image: UNESCO-UNEVOC
## Effects of greening on new qualifications and competencies

### Africa
- By 2030, up to 118 million extremely poor people on the continent of Africa will be hit harder by adverse impacts of climate change.
- Seven of the ten countries most vulnerable to climate change are in Africa.
- There is no taxonomy for green skills in Africa yet.
- The informal sector holds the key to supplying the green workforce.

### Asia
- According to the International Labour Organization, up to 14.2 million net green jobs can be achieved by 2030.
- The Asia-Pacific hires fewer professionals for green jobs than the United States and Europe, mainly due to the lack of skilled workers.
- Identifying competencies for sustainable development requires community consultation.
- TVET institutions need to develop, design, and teach green-embedded content and use green-friendly technologies in their training.

### Europe
- Green investment in 70 per cent of companies are delayed, reportedly due to lack of people with right skills.
- TVET institutions are yet to prepare well for the green economy.
- Improved policy coordination and social dialogue is needed to integrate green skills into wider skills development policy.
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Digitalisation of TVET and New Qualifications and Competencies

Image: UNESCO-UNEVOC
### Africa
- More than 80 per cent of the African population has a mobile phone, driving the digital economy, accounting for more than 5 per cent of GDP
- Only 47 percentage of population accesses the Internet
- Digitalization is a policy priority, but its introduction in workplaces is uneven and is limited in TVET
- Small-scale technologies have the potential to be transformative sources of employment in developing African economies

### Asia
- Between 2019 and 2021 internet use in the Asia-Pacific grew by 24 per cent, taking the total number of Internet users to 1.2 billion
- 45 per cent of Asia-Pacific’s population still does not have access due to lack of affordability, literacy and skills
- A significant gender gap as well as a rural-urban divide persists in the Asia-Pacific
- Progress in integrating digitalization in TVET is uneven

### Europe
- Digital access increased by 20 per cent in the last decade, Europe’s household internet access rate has risen to 92 per cent in 2021
- Demand comes from many stakeholders, employers, teachers, trainers and learners
- 4 out of 10 adults and every third person who works in Europe lack basic digital skills
- Low representation of women in tech-related professions and studies, with only 1 in 6 ICT specialists and 1 in 3 STEM graduates being women
- Technology can be used to dismantle borders
Thank you

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