ONLINE COLLOQUIUM

Taxonomy of Digital Technical and Vocational Education and Training (DTVET)

26 NOVEMBER 2020
FROM 12:00PM GMT

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الرابطة لأجل تطوير التربية في أفريقيا
Association for the Development of Education in Africa
Association pour le développement de l’éducation en Afrique
Associação para o Desenvolvimento da Educação em África
1. General Status of TVET in Africa

- Enrolments in TVET institutions remain low – just 6% of total secondary and post-secondary enrolment in SSA region.

- Female enrolment still lower (42% in Rwanda, 31% in Mauritius, 46% in Uganda and 49% in Cote d’Ivoire), from survey respondents.

- Professionally and pedagogically trained TVET trainers are in short supply.

- Admission and progression structures in TVET remain unclear.

- Career guidance is poor.

- TVET has been perceived right from its inception as meant for academic failures and inferior to academia.

- Innovative solutions/approaches for improving access, quality and relevance exist (all countries surveyed), especially those relying on digital technology:
  
  - e.g. digitization of training programs, establishment of smart classrooms in all TVET schools, ensuring internet connections in all TVET schools, ensuring penetration of ICT devices such as laptops, and blended learning comprising of both face-to-face and online learning.
## 2. General Statistics in Selected Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola (2014)</td>
<td>109,810 (54%)</td>
<td>94,072 (46%)</td>
<td>203,882</td>
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<tr>
<td>Cote d’Ivoire (2016)</td>
<td>53,353 (51%)</td>
<td>52,000 (49%)</td>
<td>105,353</td>
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<tr>
<td>Gabon (2013)</td>
<td>5087 (46%)</td>
<td>5,993 (54%)</td>
<td>11,100</td>
</tr>
<tr>
<td>Liberia (2015)</td>
<td>6324 (53.27%)</td>
<td>5547 (46.73%)</td>
<td>11,871</td>
</tr>
<tr>
<td>Mauritius (2019)</td>
<td>4273 (69%)</td>
<td>1889 (31%)</td>
<td>6,162 plus 1,000 for Polytechnics</td>
</tr>
<tr>
<td>Morocco (2019)</td>
<td>268,458 (61.4%)</td>
<td>164,621 (38.6%)</td>
<td>426,458</td>
</tr>
<tr>
<td>Rwanda (2019)</td>
<td>56,708 (58.3%)</td>
<td>40,527 (41.7%)</td>
<td>97,235</td>
</tr>
<tr>
<td>Uganda</td>
<td>78,955 (54%)</td>
<td>67,831 (46%)</td>
<td>146,786</td>
</tr>
</tbody>
</table>
3. Major Challenges in the Use of Digital Technologies in TVET

Mobile connectivity is widespread:

- Data from the World Bank show that cell phone subscriptions are highly prevalent, ranging from about 12 subscriptions per 100 people (South Sudan) to 161 subscriptions per 100 people (South Africa).

However….some challenges remain:

- Financial constraints (limited investment in ICT Infrastructure)
- Lack of qualified staff expertise and the need to acquire new knowledge
- Weak understanding of 4IR
4. Growth of Digital Skills in Sub-Saharan Africa

*Source: World Bank calculations using LinkedIn data for 27 Sub-Saharan African countries with at least 100,000 LinkedIn members.*

**Note:** Penetration means the percentage of the top-30 specific skills belonging to digital skills to highlight the types of skills that are growing or declining in Sub-Saharan Africa.

An increase in penetration of 0.010 in digital literacy between 2015 and 2018 means that the penetration of digital literacy has increased approximately three times faster than the second-fastest growing digital skill (web development).

Specifically in Sub-Saharan Africa, digital literacy increased by 0.014 (0.068-0.054) compared with an increase in Europe and Central Asia of 0.019 (0.052-0.032).
5. Conclusion

• Future demand is for workers with a new type of set of skills to succeed in the world of work. Currently, that need is not being sufficiently met, especially for soft skills.

• Learning methods currently used do not support enough the development of soft skills.

• Very few countries have a coherent national strategy to digitize TVET and skills systems because initiatives to digitize TVET may be driven variously by institutions themselves, by industry, by employment or industrial policy, or by education ministries.

• It is evident that, with the rapid change in technology, digital skills are becoming more and more essential for the jobs of today and tomorrow. Whether these changes are beneficial or not for people will depend on their skills.

• In the 21\textsuperscript{st} century, digital literacy is a skill that each citizen must have in addition to writing and reading literacies.

• COVID-19 has demonstrated the weaknesses of the TVET systems in many countries in sustaining delivery of training during the pandemic. 4IR requires all African countries to work together as these are times of rapid change.
6. Recommendations

• Develop and/or revisit TVET policies and strategies to mainstream digitalization/ 4IR.

• Ensure capacity and political commitment, in terms of:
  • Availability of ICT infrastructure, working closely with the private sector.
  • Adequate supply of better-skilled TVET trainers.
  • Instituting policy measures to attract and retain qualified trainers.
  • Initiating/ expanding workplace learning policy and practice, taking advantage of digital technology.

• Initiate cross-border collaboration to align with AfCFTA.

• Learn from the experience of partner countries such as Singapore and South Korea, among others.
THANK YOU