UNESCO-UNEVOC Trends mapping study: Digital skills development in TVET teacher training

Brief overview of methodology, findings and recommendations

Gita Subrahmanyam
26 April 2022
### Methodology and analytical framework

**Objective:** Rapid assessment of the state of TVET teacher digital skills development before and during COVID-19 pandemic

- Desk research (literature review and documentary analysis)
- Identification of promising practices

<table>
<thead>
<tr>
<th>Dimensions of digitalization</th>
<th>Support for TVET teachers/trainers</th>
</tr>
</thead>
</table>
| **Use of digital tools and services for teaching TVET** | • Measures to develop TVET teachers’/trainers’ digital skills, as well as their knowledge of new digital technologies, equipment and/or practices in the workplace  
• Measures to build TVET teachers’/trainers’ skills and competencies in applying new pedagogical approaches, instructional tools and/or educational technologies to deliver learner-centred teaching and training |
| **Digital delivery of TVET through distance learning** | • Measures to develop TVET teachers’/trainers’ capacities to use digital communication tools and online learning platforms to deliver online or offline distance learning  
• Measures to build teachers’/trainers’ skills and competencies to apply these digital tools in a pedagogically effective manner |
Prior to the pandemic...

<table>
<thead>
<tr>
<th>Main barriers</th>
<th>African countries</th>
<th>OECD countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of digital tools and services for teaching TVET</td>
<td><strong>Supply-side</strong>&lt;br&gt;• Systematic lack of resources&lt;br&gt;• Lack of ICT and other infrastructure&lt;br&gt;• Lack of trained trainers with digital skills&lt;br&gt;<strong>Demand-side</strong>&lt;br&gt;• Negative attitudes towards new technologies&lt;br&gt;• Resistance to change in teaching methods</td>
<td><strong>Supply-side</strong>&lt;br&gt;• Lack of relevant training&lt;br&gt;• Low focus on pedagogy and application of digital tools&lt;br&gt;• Lack of employer support for teacher digital competence development&lt;br&gt;<strong>Demand-side</strong>&lt;br&gt;• Lack of teacher confidence in integrating digital tools</td>
</tr>
<tr>
<td>Digital delivery of TVET through distance learning</td>
<td>• Common perception that distance learning is less effective than face-to-face, especially for practical skills training&lt;br&gt;• High costs of digital (especially online) delivery for TVET providers with small student enrolments&lt;br&gt;• Lack of information regarding the pedagogical skills needed for effective digital TVET delivery</td>
<td></td>
</tr>
</tbody>
</table>
During pandemic school closures....

<table>
<thead>
<tr>
<th>Main barriers</th>
<th>Low-income countries</th>
<th>OECD countries</th>
</tr>
</thead>
</table>
| Digital delivery of TVET through distance learning | Supply-side  
- Lack of adequate human and financial resources  
- Inadequate ICT and other infrastructure  
- Lack of trainers with skills in online/distance training  
**Impacts of barriers on TVET teaching staff**  
- Lack of teacher capacity to deliver training using digital tools | Supply-side  
- Lack of relevant training  
- Lack of relevant digital tools and resources  
- Lack of employer support  
**Impacts of barriers on TVET teaching staff**  
- Low quality TVET provision  
- Teacher mental health issues |

- 75% of TVET providers in high-income countries were able to provide fully remote training.
- 18% of TVET providers in low-income countries were able to provide fully remote training.
- 51% of TVET providers in Africa were unable to provide any form of online or offline training to students.
The pandemic highlights the need for...

**Strong policies and strategies on digitalization in TVET** to ensure that TVET teaching staff have the skills needed to prepare learners for the future of work and of learning.

**Multistakeholder partnerships and networks** to increase the level of resources and training capacities within TVET systems.

**A culture of inclusiveness and cooperation** to reduce digital divides in TVET and in TVET teacher training.

**Well-designed digital skills training programmes** that address the barriers to TVET teachers’ participation.

**Further research** on the digital and pedagogical skills and competencies needed to deliver high-quality, learner-centred, technology-enhanced distance training in TVET.
Thank you

Learn more: www.unevoc.unesco.org

@UNEVOC

Dr. Gita Subrahmanyam
Consultant, UNESCO-UNEVOC
Email: gsubrah@gmail.com