Digitalization of TVET: challenges and opportunities

Miki Nozawa, UNESCO-UNEVOC International Centre for TVET
Use of online/distance learning in TVET: before COVID-19

How often online and/or distance learning was used for courses and trainings before the outbreak of the COVID-19 in the scope of your organisation?

<table>
<thead>
<tr>
<th>Region</th>
<th>Very often/Regularly</th>
<th>Occasionally</th>
<th>Not at all</th>
<th>I don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia and the Pacific</td>
<td>20%</td>
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<tr>
<td>Americas</td>
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<td>Arab States</td>
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<td>Europe and Central Asia</td>
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<td>Africa</td>
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<td>40%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: ILO-UNESCO-WBG Joint Survey on TVET and Skills Development during the time of COVID-19 (May 2020)
Use of online/distance learning in TVET: immediate effects of Covid-19

How is training being provided in this period of the COVID-19 pandemic? (% of respondents)

Europe and Central Asia

Americas

Arab States

Asia and the Pacific

Africa

- Fully remote (online and/or offline distance learning, no face to face contact)
- Partially remote (a mixture of face to face, online and/or offline distance learning)
- No online or offline distance learning offered as we continue providing face-to-face training
- No online or offline distance learning is offered as we had to cancel all training due to the COVID-19 pandemic
- I don't know

Source: ILO-UNESCO-WBG Joint Survey on TVET and Skills Development during the time of COVID-19 (May 2020)
What do we mean by Digital transformation of TVET?

- **Digital innovation**: How technology enables new forms of teaching and learning, including new pedagogies.

- **Digital adaptation**: How technology requires teaching new skills, to adapt to the changing needs of society and the labour market.

- **Digital acceleration**: How existing policies or trends, including massification, inclusion/exclusion or (un)employability, may be accelerated thanks to technological development in society.

Source: ILO and UNESCO (2020) *The Digitization of TVET and Skills Development*
Engaging TVET institutions in the innovation process

UNEVOC Innovation Framework for TVET institutions

- In-service teacher training opportunities
- ICT tools deployed in teaching and learning
- Deployment of innovative teaching and learning experiences
- Processes for new curricula, teaching and learning experiences
- New teaching and learning methods/equipment introduced
- Innovation-related skills and competencies mainstreamed in TVET

For more information:
UNESCO-UNEVOC (2020) *Innovating TVET – A framework for institutions*
10 pilot innovation hubs of UNESCO-UNEVOC i-hubs project:
Co-development of tools, testing and peer learning
Challenges for teachers when adopting technology in TVET teaching

- Teacher competencies
- Teacher qualifications
- Access to learning resources
- Level of ICT use in TVET

For more information:
UNESCO-UNEVOC (2020) Promoting quality in TVET using technology – A practical guide
Access to learning resources:
Open Educational Resources (OER)

• ‘OER are learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others.’

  *UNESCO Recommendation on OER (2019)*

• TVET has been a rather neglected area in the OER space.
"Greening Agriculture Value Chain for Sustainable Post-Harvest Loss Management in the East African Community"

 Implemented by:
Masinde Muliro University of Science and Technology (TVET accredited University), Kenya

Development of an online module to enhance food and nutritional security among the East African Community by applying green technologies in sustainable post-harvest loss management for agricultural products.
Insights from OER grant projects

Proven benefits

• Instructors do not need to reinvent the wheel, can use existing resources and make it their own, giving them the time to improve instruction
• Offering drastic savings in the cost of education/training
• Increasing access
• Raising the quality standards for educational resources by gathering more contributors and through a peer review
• Course materials can be kept updated in real time; also helps/encourages instructors to keep current
• Creating and using OER makes TVET institutions/universities a part of an unlimited community of teaching and learning

Challenges

• Quality assurance
• Sustainability
• Some reluctant to share their work
• Accessibility to electronic resources

“Whether the material is free or expensive, it is the quality that matters.”
Global UNEVOC Network: More than 250 UNEVOC Centres in over 160 countries

www.unesco.org/unevoc