WORLD BANK GROUP

SKILLS4DEV

Skills Global Solutions Group

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EdTech - Transforming how People Engage with Vocational Training

Dear Skills community,

We are beyond excited to introduce the rehauled Skills4Dev newsletter that will equip you with the latest and most relevant resources on skills. This new thematic format will feature World Bank guest coeditors who will share their expertise and recommended reads on a selected skills-related subtopic. This newsletter will reach both our WB colleagues and the global community of experts and practitioners on skills.

This first edition is dedicated to "EdTech for TVET". At the end of this newsletter, you will find a quick poll where you can help us select the topics for the next editions.

Feel free to contact us for skills-related questions and collaboration opportunities.

Happy reading!

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Editorial

Digital disruption is changing how traditional sectors operate and how workers learn and develop new skills. Take for example the current hype (and dollars) around ChatGPT. Yet, acquiring these skills to effectively use these new AI applications can mean the difference between being left behind, or being at the forefront of innovation and competitiveness. Vocational training is a critical link in a country's skills training architecture. It offers learners technical training with a more practical focus on job-ready skills. Yet education technology spending represents only around 4 percent of total education expenditures, which may not be enough to meet the growing need to reshape vocational education and incorporate new learning tools and approaches.

With 65 percent of today's children expected to work in jobs that do not yet exist, training systems need to do more to keep pace with technological change and provide access to lifelong learning pathways. There is a challenge for education sectors in emerging markets to scale up and meet the demographics' needs, adapt to new emerging skills, and develop flexible lifelong learning models. However, meeting these training needs through a traditional bricks-and-mortar approach will be an uphill battle.

EdTech offers a low-cost scalable solution and is critical to meeting the training challenge and overcoming capacity constraints in emerging markets. This is especially important in sub-Saharan Africa, where more than 1 million people are entering the labor force each month — the vast majority with limited job-specific skills. With EdTech models gaining traction among learners, there is a huge potential to leverage innovative digital platforms and business models to improve the access, relevance, and quality of technical education and workforce training. To succeed, youth will need to develop a holistic set of digital and foundational skills that will allow them to become self-learners throughout their career paths.

EdTech is transforming how people engage with vocational training and has the potential to democratize education and training, by allowing individuals to learn anywhere, and any time. EdTech for vocational training has the potential to expand into new content areas and support millions of workers in emerging markets, while also overcoming barriers to economic inclusion.

The featured report of the Newsletter is: "Unleashing the Power of EdTech for TVET". The report provides evidence that applying EdTech approaches can allow for a potentially game-changing disruption of TVET systems. This is creating a win-win situation: for the private sector, there is a market opportunity in meeting the training needs of underserved populations; and for governments, EdTech solutions can offer a cost-effective way to build a workforce for the future. Of course, for students, it will mean having access to a plethora of learning possibilities.

Our editorial team hopes these resources will help you advance forward your country dialogue on skills. We thank you for being part of the Skills Community and we invite you to read this newsletter and to stay tuned for our next editions.

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FEATURED WORKS ON EDTECH

[Digital skills development in TVET teacher training]
UNESCO | Report | 2022

The purpose of this study is to map **trends** and **challenges** in the training of **TVET** teachers and trainers in **the context of digitalization**, and to identify examples of innovative TVET teacher training efforts that have proven successful. The study builds on the recently published UNESCO-UNEVOC Study on the Trends Shaping the Future of TVET Teaching.

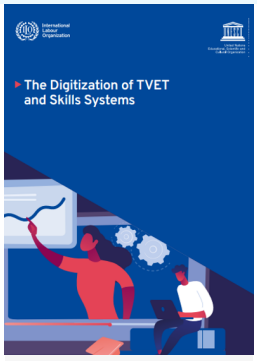
[Transforming Technical and Vocational Education and Training for successful and just transitions]
UNESCO | Book | 2022

This book outlines **UNESCO's new TVET strategy for the period 2022-2029**. The strategy takes into consideration the present and future priorities of individuals, economies, and societies. The Strategy is aligned with the global UN process for the transformation of education and has triggered national commitments from 130 countries.

[Unleashing the Power of Educational Technology in TVET Systems]
Bain et al.| Report | December 2021

This report explores the role of **EdTech in transforming the TVET system**. It discusses emerging EdTEch trends, potential business models, and funding sources, as well as policy levers that can support EdTech in TVET.

ESSENTIAL READING

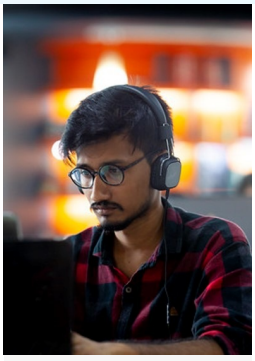


[The Digitization of TVET and Skills Systems]
Grech & Camilleri | Report | 2020

This report provides a global, high-level snapshot of the **digitalization of TVET and skills systems** in Brazil, Ghana, India, Kenya, Malaysia, Malta, Mauritius, New Zealand, Slovenia, Turkey and the United States. The primary data are derived from a set of semi-structured interviews with experts and practitioners in the TVET and education sectors, as well as a desktop literature review.

[Promoting quality in TVET using technology]
UNESCO-UNEVOC| Guide | 2020

This practical guide outlines important questions to consider when planning to use **information** and **communication technologies** (ICTs) in **education and training.**



[Working anytime, anywhere: The effects on the world of work]
Messenger et al. | Report | 2017

This joint ILO–Eurofound report considers the impact of **telework/ICT-mobile work** (T/ICTM) on **the world of work**. The findings can contribute to the development of effective policies in the areas of **digitalisation**, **fair working conditions** and **decent work in Europe** and other regions of the world.

Additional publications on EdTech

[How Can Generative AI Be Used in Higher Ed?]
Suchi Rudra |Blog Post | January 2023

This blog answers **how AI-Generated content works**, and how it has the potential to benefit and disrupt visually oriented sectors such as **gaming**, **virtual** and **augmented reality**, and **film animation**. AI also has applications for the image- and video-reliant world of **higher education**.

[2022 EdTech VC funding totals $10.6B, down 49% from $20.8B in 2021]
Education Intelligence Unit Holon IQ | Blog Post | January 2023

This blog gives an overview of the **global EdTech venture capital investment**. Global EdTech Venture Capital had a strong 2022 delivering $10.6B of investment, albeit 49% down on 2021's record levels. Expect 2023 to moderate back to pre-pandemic levels with growth in the US, Europe and India replacing China's six year run before COVID delivering more than 50% of global funding in EdTech.

[TVET: Scaffolding digital skills to the future]
Crosling et al. | Article | May 2022

Multiple resources by way of digital frameworks are available online to help TVET teachers and consequently their students address the digital needs which underpin successful educational experiences. These can also guide digital skills development. This article showcases **key features of digital skills frameworks that are relevant to TVET educators**.

[The Five Biggest Education And Training Technology Trends In 2022]
Bernard Marr | Blog Post | February 2022

Here's a look at some of the most important **tech trends affecting education over the next 12 months**. Mobile technology, cloud services and virtual reality are creating new possibilities for accessible, immersive learning.

[2022 EDUCAUSE Horizon Report Teaching and Learning Edition]
Pelletier et al. | Report | 2022

In this report, Teaching and Learning Horizon panelists reflect on **current trends** and **the future of higher education**. Many of their discussions and nominations suggest that change may be here to stay and that **there will be no return to "normal" for many institutions**. This report summarizes the results of those discussions and nominations and serves as one vantage point on where our future may be headed.

[Changing the TVET paradigm: new models for lifelong learning]
Kanwar et al. | Journal Article | Sept 2019

This paper argues for the need to **integrate informal and non-formal learning in TVET systems** and address the pedagogical implications of this integration. Research on emerging innovative approaches to TVET in both developed and developing country contexts is reviewed, with a special **focus on new models for work-based and community-based learning**, which can promote transformative, lifelong learning.

[Vocational education: why the Finns do it best]
Subrahmanyam | Blog Post | January 2014

What **practical lessons** does **Finland** have for developing countries? Today over 50% of Finnish youth apply for TVET programs, and **technical education has become more competitive than general education**. Last spring, 70% of applications to the vocational education track were successful, as against 94% to the general education track.

WHAT'S BREWING AT THE WBG?

Coursera partners with IFC and the European Commission to publish global study on women and online learning in emerging markets

Vandenbosch | Blog Post | July 2022

This blog announces the report "**Women and Online Learning in Emerging Markets**" developed by IFC in partnership with Coursera, and the European Commission

Meta-Analysis Assessing the Effects of Virtual Reality Training on Student Learning and Skills Development

Angel-Urdinola et al. | Paper | March 2021

This paper presents a meta-analysis of the results of available studies that assess **virtual reality training's impact on student learning and skills development**,

Artificial Intelligence in Emerging Markets: Opportunities, Trends, and Emerging Business Models

Bakovic et al. | Report | September 2020

This report explores **the role of AI in emerging markets and developing countries**—both across and within key sectors—both today and in the future. It also

which shows **how online platforms can support women in accessing job-relevant courses** and credentials to advance their employment and entrepreneurship opportunities.

and which rely on robust evaluation methods. The results indicate that, on average, virtual reality training is more effective than traditional training in developing technical, practical, and socio-emotional skills.

examines the issue of **gender bias**, and how Big Data can advance, rather than impede, equality. If managed well, AI solutions will expand opportunities and contribute to the **achievement of the Sustainable Development Goals**.

Additional publications on EdTech

Can VR training save lives?
Angel-Urdinola et al. | Blog Post | October 2022

This blog argues that **virtual reality** is a promising alternative to train workers to **prevent work-related accidents**. Available studies show that VR training can be more effective than traditional training in fields such as **prevention of industrial risks**.

Can Virtual Reality simulators develop students' skills?
Angel-Urdinola et al. | Blog Post | April 2021

This blog describes how **VR simulations** to develop learning experiences that would otherwise not be easily accessible to students, have become **a reliable source for educators**. Educators are starting to rely on VR simulations to develop learning experiences that would otherwise not be easily accessible to students.

COVID-19 highlights the urgency of TVET reforms
Hoftijzer et al. | Blog Post | April 2021

A year into the pandemic, this blog analyzes the disruption and innovation experienced by **TVET** during COVID-19, calling for structural reforms. TVET systems need to **address short-term implications of the pandemic** and persistent structural problems.

HELP DESK

- Help us select the topics for our next editions **here**.
- Visit our **website** and learn more about our work on skills.
- Do you have any collaboration opportunities, or would you like to share skills-related questions with us? Email us at **skillsgsg@worldbankgroup.org**
- If you haven't done so, **subscribe** to our global community to receive future editions.

Key resources to support the skills-related work of the WB community*

*These resources are available for WB staff only.

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Questions & Answers

Our mailing address is:
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