

*Ralf Hermann, Hannelore Kress, and Julia Olesen*

## ► Introduction:

# Responses to the global pandemic. Analyses, best practices, and experiences in Vocational Education and Training

The outbreak of the COVID-19 pandemic imposed manifold changes on our lives in the years 2020 and 2021. The challenges came rapidly and on a global scale. As of mid of 2021, around 200 million infections were registered worldwide, and the death toll exceeded four million people according to WHO statistics (WHO 2021). Many cases remain unreported since access to medical treatment cannot be taken for granted for many people in the world. Temporarily and repeatedly, public life came to a halt in many places and regions in the world. We had to accept far-reaching restrictions of contact and mobility and to mediatise large parts of our communication.

As for our economies, human development, and the social fabric, the COVID shockwave had immediate effects throughout the world. Severe mid-term and long-term impact is expected, although it is only vaguely predictable so far. In June 2020, the World Economic Forum declared “a crisis like no other” in light of global growth rates plummeting (IMF 2020), and the World Bank measured a 3.6 percent decline of the global GDP at the end of the year (WORLD BANK 2021). Within globally interdependent supply chains, local production fallouts caused ruptures in distant places. A not yet determined number of enterprises went bankrupt; others were only saved by public subsidies. Winners are digital trading platforms and online business providers in consumption, digital devices sourcing, and online communication service provision.

According to the ILO, 17.3 percent of full time equivalent jobs (FTE), 495 million positions, were lost in the second quarter of 2020 (compared to Q4/2019), whereby lower middle-income countries were hit the hardest and women affected disproportionately (ILO 2020). Recovery and resilience depend on sound national and regional strategies. The ILO calls to commit to a human-centered, inclusive, sustainable, and resilient approach to economic recovery (ILO 2021a). At the same time, it is obvious that for large companies the shift

to a new model of working and training was easier to manage. Micro, Small, and Medium Size Enterprises (MSME) were to a larger extent faced with infrastructure issues, limited digital literacy of users, and cost aspects in training their employees online (ILO 2021b).

COVID-19 also interfered with international cooperation in all fields – the way we come and work together. Yet, the crisis clearly showed that collaboration across borders orientated towards the common good is more than ever required. A unique and successful effort in vaccine development paved the way for a return to some state of normalcy. However, it is obvious that a “pandemic”, a global health issue, cannot be overcome by insulated solutions. Recurring waves of infections and the constant development of variations show that the global health challenge is far from over. COVID-19 is a tangible prototype of a global challenge that can only be successfully met by global cooperation. However, access to vaccines, patent related questions, and the scaling-up of production capacities in the countries where they do not sufficiently exist remain challenging.

Apart from the impact of the pandemic on healthcare systems, the global economy, and companies, the largest group affected, yet much less visible and present in news coverage, is the youth of the world. Not only companies went into a shutdown but more importantly the global education system closed for several weeks, and in some parts for ten months. Learners’ biographies were disrupted completely; children and youth were deprived of their educational and social structure from one day to another. We only start to understand the impact of these factors on their personal and educational development.

### **The impact of the COVID-19 pandemic on VET – disruptive, challenging, and digital**

Teaching, learning, and training were adversely affected by the pandemic. Vocational Education and Training (VET) had to make adjustments as quickly as possible, dealing with school closures, limited work-based learning opportunities, delays in examination, and disrupted learners’ biographies. In the on-and-off settings of face to face and distance learning, the lack of continuous pedagogical guidance for apprentices appeared to be a key issue in many places.

At the same time, digital transformation has been immensely accelerated due to the pandemic related confinements. Out of necessity, the use of digital communication tools became a daily routine for many; “home office” and “home schooling”, a widespread reality – a new normal that for working women often turned out to be a pushback in an old role cliché of household managers. The sudden urge for digital communication, teaching, and learning amplified the transition process that has been underway for about two decades. It pushed to dare to experiment and revise teaching and learning roles (or simply have teachers and trainers learn from their younger trainees and students). As digital tools were virtually the only way to continue training under institutional lockdowns, new ideas for and approaches to learning have emerged. Teachers and trainers rushed to supply materials for students and trainees without really considering how good they were, while others remembered the traditional TV format. The closure of the education system led to students not owning an in-

ternet-connected computer at their own disposal at home concentrating in small apartments with other siblings, using smartphones to follow the instructions, or just losing track of their teachers' updates and eventually falling out of the system. The data analysis on terminations due to COVID-19 is yet to be established.

Teachers, trainers, and students realized soon enough that digital tools are not magic wands to metamorphose learning and teaching by themselves. They need to be used with pedagogical and didactical mastery – a learning curve that has just begun and that is at least as critical as technological tools and competencies. Other aspects, such as security and data protection, have been neglected due to the urgency of requiring digital solutions for learning and teaching. These questions and the overwhelming global market power of only few digital companies are gaining more prominence in public discourse.

Across borders and around the globe, education practitioners as well as policy makers try to develop responses to the ongoing crisis, to envision resilient education and training systems for the future, and to counteract the widening of the digital divide. While devising and probing new technologies, processes, and understandings of teaching and learning, we are right in a global learning lab ourselves, wherein new ideas emerge everywhere and experience teaches us what works and how we can get better. Sharing this knowledge and fostering international exchange on VET in the global digital transformation has been an obvious priority.

At the time of compiling this publication, mid-2021, many countries have returned to schools and learning places. Although “returned” may not be the right term – most education systems still experience a situation with little security for mid-term planning due to ubiquitously threatening restrictions and dependency on infection rates. One might argue that the new way of learning and teaching is therefore not purely digital but rather a blended learning approach with complete flexibility and necessity to respond to changes in the learning environment on short notice. Despite the fact that when writing this text we are well 1.5 years into life in a pandemic situation, we are far away from a “new normal”. The unprecedented situation we have been in since 2020 also has an impact on research, projects, and bilateral cooperation in VET.

### **International cooperation in VET during the pandemic**

The Federal Institute for Vocational Education and Training, BIBB, responded immediately to the COVID-19 crisis by carrying out research on training market development, “systemically relevant” professions (i.e. jobs in critical infrastructures and services), digital pedagogy and further training of trainers, and more.<sup>1</sup> BIBB and its researchers analysed the short-term

---

1 Cf. HELMRICH, Robert; KALINOWSKI, Michael; BRAUN, Uta (2020): Bedeutung und Beitrag der Berufsbildung in der Krise – nicht nur in der Krise brauchen wir Berufe, die helfen und Strukturen erhalten. Bonn. Link: <https://bibb-dspace.bibb.de/rest/bitstreams/5b5f9cda-3e77-42c4-9559-c31d16f8edc6/retrieve> (Retrieved on 27.07.2021).

impact of social and economic restrictions on the apprenticeship market and developed forecasts at an early stage, allowing policy makers and the economy to develop first activities to counteract and alleviate the impact of the COVID-19 pandemic.<sup>2</sup>

Within BIBB's international department, the German Office for International Cooperation in VET (GOVET)<sup>3</sup> started to analyse international VET developments immediately after the first wave of COVID-19 had started to affect education and training institutions around the world. In particular, GOVET scrutinised the developments in VET cooperation countries of the Federal Ministry of Education and Research (BMBF), and by now issued a series of five online status reports on the referring countries with particular emphasis on digital responses and strategies.<sup>4</sup> BIBB is grateful to international partners, German Embassies, German Chambers branch offices abroad (AHK network), and development agencies such as the GIZ who thankfully provided valuable information for these enquiries.

### **Bilateral workshops as an exchange platform**

In order to proceed from analysis to exchange and mutual learning, BMBF and GOVET decided to call for bilateral expert workshops with selected partner countries that BMBF holds strong VET cooperation ties with. From July 2020 to April 2021, virtual workshops involving the USA, Israel, Costa Rica, South Africa, Italy, Ghana, and Russia took place. As intended, technical expertise on TVET and digital learning met with research, practitioners, and politics. The virtual format allowed for a broader participation of technical experts and affiliated partners in the referred countries. The total number of almost 250 participants exceeded by far what would have been the limits of participants in a real encounter of policy partners and a selected few. While being a very cost-effective format of exchange, the virtual workshop also displayed its limitations. In a dense timeframe, it is challenging to allow multiple voices per country, allocate enough time to each presenter to provide their inputs, and at the same time facilitate a substantial discussion. The informal continuation behind the scenes in "real" meetings often leads to further exchange, creative dissent, and new ideas. There is no virtual substitute to this.

The first workshop was conducted in cooperation with representatives from the U.S. Department of Labour in July 2020. At this point in time, the experts from the USA and

---

2 Publications in relation to the COVID-19 pandemic can be found here (mostly in German): <https://www.bibb.de/de/124168.php> (Retrieved on 27.07.2021).

3 GOVET is a Federal Government facility established by a cabinet decision in 2013, with the mandate to foster coherent inter-departmental and stakeholder inclusive approaches to international VET cooperation. For further information confer [www.govet.international](http://www.govet.international) (Retrieved on 27.07.2021).

4 Link: <https://www.govet.international/de/140987.php> (Retrieved on 27.07.2021). The papers are predominantly directed towards the German community of stakeholders of international VET cooperation and were supposed to provide them with necessary information on the impact of the crisis on the referring countries as well as on cooperation activities.

Germany focused on the analysis of the impact on the labour and apprenticeship market. Even though the pandemic had just unfolded, it was already clear that the impact would be fundamental: rapid switches to digital environments took place in schools, companies, and training providers. Despite the challenges, the experts agreed on the opportunities the current situation represented when it comes to new forms of learning and understanding VET as a tool of resilience against youth unemployment.

During the bilateral workshops with Israel and Costa Rica taking place in February and March 2021, the experiences of practitioners and the analyses of researchers had developed further: digital learning and working had become the new reality. The representatives from Costa Rica demonstrated how they had quickly switched the whole education system to distance learning and how vocational orientation programmes continued in a virtual format. The researchers from Israel painted a grim picture of the psychological impact of confinements and school closures just at a point in time when the first studies with similar findings were published in Germany. In Israel, digital coaches were introduced rapidly and at each institution.

The experts from South Africa showed the national recovery strategy that puts a great emphasis on skills and training. They indicated that learning gaps and inequalities among students and trainees are widening due to the digital divide many of them face. Although virtual learning platforms have been implemented on a national basis, (technical) accessibility and adequate learning environments do not exist equally for all learners, and pedagogical capacities need to be uplifted. Similar challenges were reported by the experts from Ghana who also gave examples of low-threshold methods that enabled teachers and learners to maintain communication in times of lockdown.

The workshop with Italian participants was slightly different, focusing on the recognition of prior learning, i.e. the recognition of competences acquired through non-formal or informal learning. But again, digitalization is a key component and challenge in this area. At the bilateral workshop with Russian VET experts, digital didactics and pedagogy were in focus together with sharing first experiences in digital formats for internships or vocational orientation.

### **Joint publication with international voices**

All workshops were conducted in bilateral format. Thus, a joint and truly international exchange between multiple countries could not take place. This volume, therefore, documents the workshop series in an intent to facilitate the exchange of experiences at an international level. It comprises papers from all participating countries. In line with the intended research–practice–politics encounter, the range of contributions is diverse, reaching from research-based findings to shop floor reports and strategic policy outlines. The publication includes the following texts (in alphabetical order by country):

**Ileana Arce Valerio**, Head of Educational and Vocational Guidance Department at the Ministry of Public Education, Costa Rica, first analyses the impact of the pandemic on the

Costa Rican Vocational Guidance activities. She also presents how they were adapted to fit in a virtual setting.

**Sepehr Shahin**, Policy and Strategy Advisor at GOVET, together with **Dr. Ralf Hermann**, Head of GOVET, provide an overview of the policy measures implemented in Germany to support its dual vocational education and training system and the economy as a whole.

**Dr. Tobias Maier**, Researcher at BIBB, provides an analysis of the most recent apprenticeship figures from 2020/2021 and analyses whether the apprenticeship market now stands at a turning point, with the COVID-19 pandemic possibly marking the start of a continued downturn in future years. He identifies a set of measures that can prevent this development. His article was first published in a special edition of another BIBB publication series on the impacts of the COVID-19 pandemic.<sup>5</sup>

**Dr. Verónica Fernández Caruncho**, Researcher at BIBB, analyses the effects of the COVID-19 pandemic on young people during the transition from school to training and work. She takes a very practical point of view and examines different approaches developed to facilitate the transition of young persons into training or work.

**Michael Härtel**, BIBB Head of Department for VET personnel, stresses that digital competencies of trainers have gained importance during the pandemic. Even though this is not a surprising fact, he conceptualizes the skills requirements for trainers in relation to the new competencies of the world of work and, thereby, points out the increasing complexity that trainers are confronted with. He explains the concept of media-pedagogical competencies that are imparted in a 12-week seminar developed by BIBB.

**Dr. Fred Kyei Asamoah**, Director General of the Commission for TVET in Ghana, presents an overview of the situation analysis his organization has undertaken to examine the impact of the pandemic on the vocational training providers.

**Dr. Christina Boateng**, Professor at the University of Cape Coast in Ghana, in an interview with GOVET Senior Technical Advisor Julia Olesen highlights some of the experiences made with trainings in order to strengthen digital competencies of trainers. From Dr. Boateng's experience, it is important to build upon existing competencies of trainers and students.

**Benjamin Bental**, **Alex Weinreb**, and **Avi Weiss**, all from Taub Center in Israel, reflect on the responsiveness of the vocational training system in times of the COVID-19 crisis. They analyse how incentive programmes devised by the government have increased skills among workers.

**Orit Vaknin-Shiloh**, Director of the Department of Apprenticeships and Youth, and **Dr. Shai Hen-Gal**, Chief Psychologist at the Ministry of Labour, Social Affairs and Social Services, Israel, analyse the psychological impact of the COVID-19 pandemic on young persons. They conclude that it had severe consequences: increased mental distress and suicidal be-

---

5 Please refer to "Berufsbildung in Wissenschaft und Praxis": <https://www.bwp-zeitschrift.de/de/bwp.php/de/bwp/show/1711> (Retrieved on 27.07.2021).

behaviour as well as elevated depression indicators. In addition to the analysis, they give an overview of intervention programmes that were implemented on short notice.

**Alessandra Biancolini**, Executive, and **Andrea Simonici**, Head, both from the Research Unit II “Monitoring of Vocational Training and European Social Fund” at the National Agency for Active Labour Policy (ANPAL), Italy, provide an extensive overview of the economic policies that were implemented in Italy to confront the repercussions of the COVID-19 pandemic. Vocational Education and Training has a very important role in the active labour policy revival programmes in Italy. This focus is also beneficial to the Italian dual system.

**Dr. Vladimir Blinov**, Director of the Research Center for Vocational Education and Qualification Systems of FIRO RANEPa, first emphasises the challenges that virtual learning often entails and analyses different approaches adopted by training institutions in Russia in times of the COVID-19 pandemic. He also points out success factors when implementing distance learning in VET.

**Dr. Natalya Victorovna Lomovtseva** from the Russian State Vocation Pedagogical University in Yekaterinburg analyses the challenges of switching to remote education models and examines some of the solutions that were brought forward in times of the pandemic.

**Dr. Igor Sergeev**, Leading Researcher at the Research Center for Vocational Education and Qualifications Systems at FIRO RANCHI, provides an overview of the changes that the pandemic imposed on career guidance in different regions of Russia and on the transition of young persons into the labour market.

**Dr. Oksana Sidorenko**, Deputy Director for Educational Work at the Chita Pedagogical College, reports on her organization’s experience in enhancing digital competences of trainers.

**Professor Stephanie Allais**, South African Research Chair of Skills Development at the Centre for Researching Education and Labour, University of the Witwatersrand, reflects on the impact of an economic development policy adopted in South Africa to confront the challenges of the pandemic and analyses its impact on skills development.

**Carina Adam**, Project Manager for the BMBF-funded project TRAINME, gives an insight into the project itself, the required changes that were made due to the COVID-19 pandemic, and the ways in which digital competencies of trainers were expanded.

**Robert B. Shepard**, **Li Zhao**, and **Randall Denison**, U.S. Department of Labour, provide an overview of different apprenticeship programmes and policies that have been implemented in the past years and analyse new trends in apprenticeship since the start of the COVID-19 pandemic.

**Miriam Farnbauer**, Project Director of the California based DIAG USA Foundation, and **Dr. Diana Elliott**, Principal Research Associate at the Center on Labor, Human Services, and Population at the Urban Institute, USA, exchange with Dr. Hannelore Kress, Chief Technical Advisor at GOVET, on the impact of the pandemic on the VET system in the USA.

All authors share the opinion that the COVID-19 pandemic posed unprecedented challenges to the national Vocational Education and Training systems. During the bilateral workshops in the first half of 2021, it became obvious that those challenges are manifold and touch upon all areas of VET: competences of teachers and trainers, a new organization of learning environments, socio-psychological impact on learners, and the transition from school to VET to work, among others. While all countries have made great efforts to alleviate the negative impact of the pandemic, defining a streamlined strategy for VET is a considerable task. It also seems to be a global challenge to advocate for the youth when economy-related issues often seem to have a louder voice. The new and ever-changing situation requires a lot of flexibility, improvisation, and permanent adaptation: the pandemic is not suddenly “over”, the world is now in a transition period; and education systems are deeply impacted by that.

The texts are to be understood as a “situation analysis” and not as a closure to discussion and exchange. Already during the bilateral workshops and thereafter, the international partners have emphasized their interest in further exchange, collaboration, and knowledge-sharing. This documentation is supposed to be a basis for future cooperation and peer learning.

## References

- INTERNATIONAL LABOUR ORGANIZATION (ILO) (2020). ILO Monitor: COVID-19 and the world of work. Sixth edition. Link: [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms\\_755910.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_755910.pdf) (Retrieved on 27.07.2021)
- INTERNATIONAL LABOUR ORGANIZATION (ILO) (2021a). Resolution concerning a global call to action for a human-centred recovery from the COVID-19 crisis that is inclusive, sustainable and resilient. Link: [https://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---relconf/documents/meetingdocument/wcms\\_806092.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_806092.pdf) (Retrieved on 27.07.2021)
- INTERNATIONAL LABOUR ORGANIZATION (ILO) (2021b). Skilling, upskilling and reskilling of employees, apprentices and interns during the COVID-19 pandemic. Link: [https://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---emp\\_ent/documents/publication/wcms\\_794569.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_794569.pdf) (Retrieved on 09.08.2021)
- INTERNATIONAL MONETARY FUND (IMF) (2020). World Economic Outlook. June 2020. Link: <https://www.imf.org/-/media/Files/Publications/WEO/2020/Update/June/English/WEOENG202006.ashx> (Retrieved on 22.07.2021)
- WORLD BANK (2021). GDP Growth annual (%). Link: <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG> (Retrieved on 27.07.2021)
- WORLD HEALTH ORGANIZATION (WHO) (2021). Numbers at a glance. Link: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019> (Retrieved on 22.07.2021)