



CONCEPT NOTE

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ADEA 2021 HIGH-LEVEL POLICY DIALOGUE FORUM Rethinking the role of Skills Development in future work and lifelong learning, in light of digitalization and 4th Industrial Revolution (4IR)



Ushirika wa Maendeleo ya Elimu Barani Afrika
 الرابطة لأجل تطوير التربية في إفريقيا
 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



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Context and Rationale

From a subdued growth in 2019, the global economic outlook was initially set for a modest improvement of 3.4% in 2020 and growth in low-income developing countries was expected to remain robust, albeit with heterogeneous performance (World Economic Forum 2019). This was before the arrival of the novel Coronavirus (COVID-19), which has had a profound impact on the previously positive outlook, going by the traditional socioeconomic indicators, including for education. Africa has, indeed, recorded impressive economic growth over the years. From an estimated value of 3.4% in 2019, the continent's real GDP growth was projected at 3.9% and 4.1% in 2020 and 2021, respectively. Increased access to education, improved telecommunication coverage and use of mobile technology for business, and an overall improved environment for investment are among the key contributing factors to this growth, which has created opportunities for employment and employability, especially of the skilled youth. The COVID-19 pandemic has, however, necessitated revisions of these projections downwards. Africa's GDP is expected to grow by 3.4% in 2021 after shrinking by 2.1% in the previous year due to the COVID-19 pandemic, according to the African Development Bank's African Economic Outlook 2021 report. Noting that the pandemic's effects could reverse the gains in poverty reduction over the past two decades, the Bank observes that inequality is likely to increase, and school closures could have long-lasting consequences for human capital accumulation, growth in productivity, and the transition between education and labour markets resulting in potentially lower motivation to hire new entrants. The report calls for scaling up active labor market policies to retool the workforce for the future of work. It also recommends intensifying structural transformation through digitalization and economic diversification to build resilience, among other policy priorities to accelerate transformation to a sustainable post-pandemic recovery.

The Fourth Industrial Revolution (4IR) has important implications for education, employment, and the future of work. Digitalization and the increased use of new technologies like artificial intelligence, cloud computing, robotics, 3D printing, the internet of things and advanced wireless technologies have created new jobs, improved the ease of doing business and enhanced social interaction. Mobile money transfer is one of the game changers in the continent, and the use of transaction and savings data has increased access to credit for informal traders and poor households; spurring investment, growth of small and medium-size enterprises (SMEs) and employment. Digital platforms are also stimulating entrepreneurship and self-employment. The continent still lags far behind in 4IR technologies, however, with many of its countries remaining digitally under-connected. COVID-19 has brought this reality home much faster than anticipated. Against the backdrop of this pandemic, and the need to leverage technology in key sectors, including education - as part of national preparedness against future crises - some of the most advanced countries in robotization, for example, are also some of the least prepared globally in terms of policy and strategy in innovation, education, and skill set needs for the 21st century. Inequalities impede economic growth, especially in low-income countries in Africa. Most women work in the informal sector with little or no pay, and compared to men, have more limited access to credit, inputs and markets for their products. Many young boys and girls of school-going age are out of school with no skills – meaning they are in the ranks of the so-called NEET (not in education, employment or training). Policies and laws promoting gender equality and women's economic empowerment are either weak or remain ineffective in enforcement.

Current Challenges in Skills Development in Africa

Skills development is a key factor in reducing underemployment, unemployment and improving employability; increasing productivity and competitiveness; reducing poverty and exclusion; strengthening innovation and attracting investment. A holistic approach to skills development encompasses features such as continuous and seamless learning pathways, development of core and higher-level skills, transferability of skills and employability and putting in place sustainable mitigating measures against unforeseen emergencies such as COVID-19. As part of provoking reflection on means of transforming education and training systems into a powerful mechanism for generating the human capital Africa needs for its sustainable development, the ADEA Triennale in Ouagadougou, Burkina Faso (2012) identified three critical skill areas necessary for lifelong learning and accelerated and sustainable development in Africa. These are common core skills, Technical and Vocational Skills Development (TVSD), and acquisition of scientific and technological knowledge and skills. The Triennale created a holistic approach to education and training that recognizes the key role of science, vocational training, information and communication technology, and lifelong learning in sustainable development. In the follow up Triennale in Dakar, Senegal (2017), African governments committed to promote and implement appropriate and coherent policy responses and practices in order to focus on STEM (Science, Technology, Engineering and Mathematics) and STI (Science, Technology and Innovation), and to equip African youth with the knowledge and skills to meet challenges of the 21st century and facilitate their integration into the world of work and entrepreneurship. Most of the challenges around skills, identified nearly 10 years ago in Ouagadougou, remain; however, new dimensions have emerged – the advent of accelerated digitalization within 4IR and COVID-19. The pandemic has exposed persistent learning gaps and educational inequalities between countries and within societies. The foregoing section highlights some of the existing and emerging challenges across the education spectrum.

Early Childhood Development

In many African countries, early childhood development (ECD) is still in the hands of private players with quality teaching and leadership capacity as remaining key challenges. Thus, many children are still not ready for schools, and neither are the schools ready for the children. Greater attention is needed for life skills, personal development skills, peace building skills and other social skills at this level to ensure assessment practice is well chosen and supportive. The transformation of ECD also requires the capacity development of the different types and levels of personnel (e.g. management and administrative, support, as well as teachers, parents and community members). The ECD pedagogy also needs continual upskilling due to the importance of effective early skill learning. ADEA ICQN on Early Childhood Development has in 2019 initiated the process of supporting countries to put in place key policy support mechanisms for delivering quality ECD services, strengthening the capacity of the early years workforce, institutionalizing a data-driven system for measuring early learning and establishing online capacity building graduate ECD leadership programmes. There is still much work to be done in enhancing skills at this level. How can governments and partners leverage digitalization to better understand the level of quality in ECD and overall levels of learning and development among young children (especially as they exit pre-primary education and head to school)? To what extent is ECD systems helping to address equity gaps in learning? In what ways can we leverage technology to inform policymakers and other stakeholders about teacher training and preparation before entering the classroom, and how best to support the ECD teachers once they are teaching?

Basic Education

The current challenge at the basic education level is the poverty of learning. Ongoing initiatives to improve foundational learning still fall short, going by the poor learning outcomes in literacy and numeracy, and the low completion rates, recorded at this level. Findings from a study on reforming secondary education in Africa (MasterCard Foundation, 2020) identified digitalization, automation, and technological advances as changing the nature of work globally, including in Africa, and secondary education will be a key platform for young people in Africa to enter the world of work. The report calls for the integration of key skills relevant to labour market needs into secondary education curricula and pedagogy, including foundational, 21st century, and digital skills as well as STEM knowledge and skills, among others, in addition to ensuring alignment between competency-based curriculum reforms, pedagogy and assessment systems. A recent analysis of the demand and supply side for education and skills at secondary education and TVET levels in six African countries conducted by the African Center for Economic Transformation (ACET, 2021) (in terms of access, quality, and relevance) highlight several challenges in secondary education. These include persistent gender inequalities, superficial participation of the private sector in curriculum development, and little recognition of informal learning (experiential and on the job training skills) as major contributors to skills development, weak teacher preparation and upskilling to fully embrace skills to implement CBC and 21st century teaching needs, and inequalities in access and utilization of ICT.

The need to strengthen focus on STEM and 21st century skills from the basic education level becomes even more critical in the 4IR era where adaptability skills will help to navigate the future uncharted skills territory. Some of the key challenges with regard to STEM uptake in basic education include inadequate teaching and learning resources and facilities; poor teacher pedagogical practices; student lack of interest in STEM subjects; relevance of STEM curriculum; and insufficient number of teachers of STEM subjects. These challenges are inter-sectional, with implications on the type of strategies that should be mounted to address them (ADEA, ICQN-MSE STEM Education Situational Analysis Report, 2021).

Questions to ponder for this sub-sector include (i) What does it take to close the large digital and equipment divide between the private and public, and urban and rural, primary, and secondary schools? (ii) Considering that public schools absorb most learners, with populations being more in rural than in urban areas, how can the imbalance in teachers and equipment for these two areas be addressed? (iii) Can partnership arrangements between public and private schools be developed, for learners to access high-end facilities found in private schools? (iv) What mechanisms can be put in place, as part of strengthening the ongoing shift towards CBC and laying emphasis on STEM, to effectively address challenges ranging from limited access to equipment and internet connectivity to poor course content; limited teacher preparation to weak and inconsistent implementation of policy changes? (v) How can we increase access to, and use of, digital devices for parents and communities to contribute in supporting learners outside the schools?

Technical and Vocational Skills Development (TVSD)

Higher technical and vocational skills are crucial in enhancing competitiveness and contributing to social inclusion, decent employment, and poverty reduction. Acquisition of vocational skills was among the most affected by the COVID-19 pandemic, in part because they are practice-oriented and difficult to deliver in remote learning environments that characterized the closure of learning institutions. The responsiveness of Technical and Vocational Education and Training (TVET) systems to dynamic labour market demands has to be strengthened. In fact, many of the professions that will most likely be affected by labour market transformations brought about by the 4IR are linked with TVET. The term Technical and Vocational Skills Development (TVSD) refers to the acquisition of knowledge, practical competencies, know-how and attitudes necessary to perform a certain trade or occupation in the labour market. For this concept note, TVSD corresponds to the broad UNESCO and ILO definition of TVET. Current challenges include the following:

- **Blending of digital skills and 4IR with weak integration of technology in traditional TVSD programmes;**
- **Inadequate financing and poor-quality training in public and private TVSD systems, insufficient training of TVET personnel, including continuous professional development;**
- **Limited recognition/accreditation of informal systems;**
- **Outdated infrastructure and equipment;**
- **Lack of efficient and effective public – private partnerships to facilitate acquisition of practical skills in the industry and workplace learning practices;**
- **Lack of social dialogue between governments, social partners, TVSD institutions, learners and parents; and**
- **Need for new pedagogy/teaching-training style towards learner-centered approach and support in self-learning skills.**

How can Africa reform the technical and vocational skills development to embrace the Fourth Industrial Revolution and 21st century skills to better prepare its youth and adult population for the work of the future? What strategic reforms should governments institute in this area to address the above challenges, including the impact of COVID-19, in partnership with stakeholders such as the private sector, development partners, civil society and the youth and ready themselves as the port of call for skilled labour for the regional and local labour markets? How can African governments seize the opportunity brought by the African Continental Free Trade Area (AfCFTA) to increase skills mobility? What lessons can be learnt from innovations implemented in some countries in this area (i.e. relevance of skills, insertion into the labour market, etc.), and the experience of emerging/homegrown innovations supporting sectors such as health and education during COVID-19?

Higher Education

Africa's development necessarily hinges on a higher education system and research that plays a key role in knowledge-based economic growth strategies; contributes to the constitution of human capital by training a qualified workforce; supports innovation by creating new knowledge accessing global knowledge reserves; and adapting this knowledge for local use, and the acquisition, construction and validation of scientific knowledge.

Although some countries have adopted higher education governance structures and initiated innovations in training (university, vocational) with quality diversification, there is a clear case of insufficiency in these efforts. This deficit is linked to financing methods and limitation and, above all, lack of effectiveness and efficiency in the use of resources and in the context of the growing number of youths looking for higher education studies. Research remains the poor relation of the policies of several African countries in terms of both infrastructure and equipment, personnel and therefore funding. In addition, there is a mismatch between existing research and potential areas of needs where the research can be applied.

Key issues and challenges in higher education relate to inappropriate teaching and learning environment; capacity and non-modernization of the higher education system (few and outdated infrastructure); inadequate levels of qualified teaching staff; few vocational courses in STEM - making it difficult to improve the employability and integration of graduates - weak existing vocational and STEM courses; under-developed remote learning (inadequate training of teachers in the mastery of educational technologies, lack of distance learning offers with international quality standards to improve access and the quality of ICT infrastructures); difficulty in combining the different types of knowledge in training and research to develop transversal skills and expose students to innovative and multidisciplinary environments; and weak governance of national research and absence of national structures for the promotion and transfer of research results.

Again, the question of how digitalization can help in addressing the above challenges remains in terms of both increasing access (case of remote campuses in the developed world), quality, relevance, and innovation.

Objectives and Expected Outcomes of the HLPDF

The overall objective of the 2021 ADEA High-Level Policy Dialogue Forum is to promote knowledge and experience sharing around practical and innovative solutions to address the skills gaps and the critical challenge of reforming Africa's education and training systems to equip the youth with the skills required for the future of work. The Forum will share insights on new/emerging trends in evidence and best practices on the role of education and training in preparing the workforce of the future, take stock of current policies, programs, and innovative actions, and analyse their implementation to come up with actionable recommendations.

In terms of basic education, the Forum will explore strategies that can promote the integration of digital technologies in basic education to promote access and quality as well as integrating 21st century skills. It will also identify strategies that leverage ongoing regional integration frameworks to modernize and harmonize basic education and teacher training for skills mobility.

For the TVSD sub-sector, the Forum seeks to:

1. Explore the challenges and value addition of digitalization across TVSD systems (non-formal, informal and formal) in developing a skilled workforce for the Fourth Industrial Revolution.
2. Share experiences and working practices around the role of digitalization in supporting innovative and alternative financing mechanisms for TVSD.
3. Explore strategies of moving from research and studies to implementation and embedding the strategies and recommendations in country level priorities and practices.

For higher education, the specific objective is to identify ways of leveraging digitalization to reform policies, strategies and programs to meet Africa's needs and priorities, with a particular focus on (i) improving the teaching and learning environment, (ii) building and modernizing infrastructure, (iii) having adequate qualified teaching staff at various levels, (iv) enhancing the quality of STEM graduates, (v) developing remote learning and transversal skills, (vi) improving the governance of national research and promoting the transfer of research results to address set needs and priorities.

The overall expected outcomes of the Forum include:

1. Shared understanding of mechanisms for leveraging education and training to empower African youths to contribute effectively to the future socio-economic transformation of their respective countries and the continent at large.
2. Shared knowledge, experiences, good practices and lessons to inform policies and programmes aimed at improving the use of digitalization in skills development to prepare the youth for the Fourth Industrial Revolution workplace.
3. Strategies for harmonizing education and skills development using digitalization.
4. Fostered partnerships among key stakeholders to advance policy and strategy development and implementation.
5. Strategies for moving from research and studies to implementation and embedding the strategies and recommendations in country-level priorities and practices well-documented to inform the next step of developing a policy guide for countries.

Proposed Theme, Format, Dates and Sub-Themes

The proposed theme for the 2021 ADEA High-Level Policy Dialogue Forum is: ***“Rethinking the role of Skills Development in future work and lifelong learning, in light of digitalization and 4th Industrial Revolution (4IR)”***. The Forum will be held in a three-part consecutive series, with each of the series devoted to a specific sub-sector or domain. **The first one will be held on 8th July, focussing on TVSD. Due to the COVID-19 pandemic, the event will be held virtually via the Zoom platform. The dates for the series on basic education and higher education will be communicated in due course.**

The following are the proposed themes for each of the sub-sectors/domains:

Basic education:

- 1. The Fourth Industrial Revolution and digitalization.** How can digital skills be integrated into basic education in the era of 4IR with a cascading effect to help advance access and quality for learners in an inclusive manner?
- 2. Improving teacher/trainer quality.** How can we address teachers/trainers’ preparedness through innovative and relevant training programs? What are the mitigating strategies for the low status challenge of the teaching profession? How can we enhance the status of the profession through professionalization of individual’s teachers/trainers with support from education institutions and partners? How can their role go beyond teaching practice to engaging in social and economic development of the sector?
- 3. Digitalization and transferability of qualifications.** How can we increase the transferability of qualifications and mobility of skills across sectors?

Technical and Vocational Skills Development (TVSD):

- 1. Relevance – Unlocking the potential of the African skilled workforce with relevant TVSD.** How can the relevance of TVSD be strengthened in order to provide a competent and qualified labour force for thriving African economies ? How can we address the widespread mismatch of supply and demand in African labour markets, while looking at best practices; integrating practical elements into TVSD; and discussing innovative solutions of social dialogue. How is labour demand in industry changing in the face of digital technologies? How can we build stronger partnership links, particularly with the private sector, including in a digitalized labour market, as both providers of, and investors in skills?
- 2. Quality – Unleashing the power of educational technology (EdTech) in TVSD.** The same disruptive technologies that are transforming traditional markets and changing the skills demands are also altering the methods through which workers can learn and acquire these new skills. EdTech innovations, such as technology-enabled learning materials, online and blended learning, adaptive learning software, and micro-credentials, can help to close skills gaps in developing countries by improving the quality of TVSD delivery, particularly as it relates to acquisition and assessment of technical skills. But unleashing the transformative potential of technology in TVSD requires the right enabling environment, including infrastructure, partnerships, and digital skills for teachers, trainers, and learners.

How can digital skills be integrated into TVSD in the era of 4IR with a cascading effect to help advance access and quality training in an inclusive manner? How can we best use technology to enhance TVSD systems and teaching and learning experience? How can teachers, trainers and learners address the changes and challenges brought by digital technologies?

- 3. Access – Reaching out to Vulnerable groups.** Considering the large numbers of unskilled out-of-school youth, especially during the pandemic, how can countries offer equitable and inclusive access to TVSD for vulnerable groups, while enhancing competitiveness and contributing to social inclusion, decent employment, and poverty reduction? How can alternative financing (e.g. from private providers, investors, innovative student financing, etc.) expand skills provision to these groups?

Higher education:

- 1. Infrastructure:** Practical strategies for embedding new technologies, especially digital technology, to build and modernize infrastructure in higher education, including equipment.
- 2. Quality teaching:** Leveraging digital technologies to increase the numbers and capacity of qualified teaching staff at various levels of higher education.
- 3. Improving remote learning:** How to improve remote learning to support the provision of STEM and transversal skills.
- 4. Research and development:** Using digitalization to improve the governance of national research and promote the transfer of research results to address set needs and priorities in Africa.

There are crosscutting issues to all the sub-themes above, one of which is the gender dimension. The Forum will also involve discussions on resolving issues based on innovative experiences and success stories. The nature and diversity of issues and challenges relating to the theme make it essential that all types of partners and stakeholders contribute to the debates and implementation of the outcomes of the Forum as much as possible: Ministers in charge of TVET/TVSD, Technology and Innovation, Education, Finance and Economic Planning, Youth and Gender; Members of Parliament and Senior Government officials; African Union and Regional Economic Communities (RECs); Technical and Financial Development Partners; Private Sector Representatives; International and Regional Organizations and CSOs; African youth and young entrepreneurs; Teachers and Trainers unions; Qualification Boards; Training providers; International and Regional Experts; and ICQN's Host country participants.

Conclusion

This Annual High-Level Policy Dialogue Forum should be considered as an intermediate pathway that all stakeholders can follow together. The Forum should help inform countries to target specific programs for piloting and look to ADEA to support the countries through its network of experts and partners in the implementation process. The Forum should support the direct translation of the policy options into tangible and achievable actions that can be implemented, monitored, and then scaled up and replicated to guide the focus of stakeholders in coordinating their actions.



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Association for the Development of Education in Africa (ADEA)
African Development Bank Group (AfDB),
Immeuble CCIA Plateau, Avenue Jean-Paul II
01 BP 1387, Abidjan 01, Côte d'Ivoire
Email: adea@afdb.org - Website: www.adeanet.org

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