## WORLD YOUTH SKILLS DAY 2021

#### 15 July 2021

# Re-imagining Youth Skills Post Pandemic



Join IMPACT BORDERLESS DIGITAL (IBD) Youth Career Fair

from 15:30 EAT as the Founder presents on

Youth and Managing the Transition from Job Security to Career Security with Requisite Skills and Policies

## by

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Registration link: Meeting Registration - Zoom

## Key Research Findings on Youth and Skills Development in Kenya

#### Background to the Youth STI Skills Revolution Challenge

Though contemporary global development discourse tends to be convoluted and at times contested on complex issues, such as climate change, there is clarity and concurrence on the key role of Science, Technology and Innovation (ST&I) in enhancing socioeconomic growth and development. Without innovation, growth runs into diminishing returns, hence the critical role of ST&I. As human-induced changes continue to threaten the sustainability of the limited natural resources upon which factor-driven economies depend, the majority being in Africa, ensuring ST&I-driven value addition and **skills revolution** is becoming more urgent.

The World Economic Forum acknowledges innovation as the only pillar of global competitiveness that does not run into diminishing returns. Achieving an innovationdriven economy is, consequently, a worthy national goal. In recent years, policy attention has been shifting towards investing in young talents while promoting knowledge- and technology-led socioeconomic transformation. The Knowledge Doubling Curve surmises that knowledge will soon double every 12 hours thanks to the Internet of Things (IoT), a spectacular surge from 1945 when the period use to be 25 years and recently in 2017, when the period had reduced to only a year.

The strategic role of intellectual capital in building knowledge economies and transitioning nations into advanced stages of development is gaining currency with today's technological innovation and data-driven digital revolution. At the 2021 World Economic Forum, capitalism was again challenged on the basis of new growth perspectives pegged on talents, hence "talentism". Digital transformation, accelerated by COVID-19, is also disrupting the traditional capitalist orientation of business models — shifting the ground in favour of a sharing or collaborative economy in which career security is replacing job security as a key aspiration for workers. The emerging world of work promises increased labour participation rates through flexible work in the gig economy, with increased labour mobility. Digital fluency and domain expertise in science and technology are gaining prominence as a result. In this respect, achieving enhanced **skills proficiency** in ST&I among the youth, Africa's dominant demographic, qualifies as a long-term development policy objective.

#### Why Focus on the Youth in Africa?

The median age of barely 20 in Africa as opposed to over 40 in most of Europe makes talent management and skills development agenda a principally youth-centric challenge in the

region. As this study found, low levels of skills proficiency constitute a critical constraint on national development outcomes and can explain high youth unemployment rates. The 2020 Global Skills Index report by Coursera showed that a percentage point gained on a country's average skills proficiency is associated with an increase of about 600 USD in per capita GDP.

Under the African Union's Agenda 2063, Goal 2 focuses on ensuring a well-educated citizenry and a skills revolution underpinned by ST&I. Kenya has been a key country example in promoting ST&I as a critical foundation for the pillars of her long-term national development blueprint – Vision 2030. Skills-based education and training in Science, Technology, Engineering, and Mathematics (STEM) is key to developing the requisite capacity in the youth to be innovators. The prevailing context for ST&I readiness among Kenyan youth, however, features education curricula and industry exposure modes that do not prepare them adequately for the dynamic labour market. Industry has been reporting growing cases of skills deficit and skills mismatch among young graduates.

## Findings of the 2021 Youth Skills and Employment Research in Kenya

The main objective of this study was to identify the weak and missing links in youth skills development for ST&I in Kenya's formal education system and supplementary capacity building programmes. The study further examined how the weaknesses and missing links translate into a skills deficit and mismatch in the technology marketplace and labour market. The countrywide online survey captured data between March 5 and April 5, 2021 from a sample of 437 youth aged 18-35: 219 females and 218 males drawn from all the 47 counties in Kenya. This strategic age bracket represents the most active population acquiring higher education and taking on new jobs or settling in their early career phases.

Only 29% were in regular employment or employer status while 14% were gigging, with 36% not employed and 21% not actively looking for work or unavailable for work because of studies. Among the respondents, the highest qualifications included: Diploma (16.8%), Bachelor degree (63.7%), and Master's degree (6.7%), 4.8% TVET certificate holders, 7.8% secondary school certificate holders, and 0.2% holders of primary school certificate. The majority (55%) of the respondents identified with STEM specialisations and 52% identified with with logical-mathematical intelligence (37%) and visual-spatial intelligence(15%). A quiz administered on digital literacy and global awareness, however, confirmed a low median score of 13% and a mean of only 16%, with the 75<sup>th</sup> percentile score at 25%. This low degree of awareness was also reflected in the awareness of the SDGs (18%) despite 64% of them being Bachelor degree holders, 17% Diploma holders, and 7% Master's degree holders.

The findings also included a lack of early talent identification mechanisms in the basic education system, only 26% of the respondents stating they had definitively identified their

talents before joining tertiary education levels. The majority (77%) preferred that learners be assisted in identifying and nurturing their talents either at the pre-primary or primary school level. Only 30% stated that their education and training had brought out the best in them in terms of refining their talents, with the overall message being that the refinement was just a bit at best. As to where their education and training refined their talents well, the tertiary education level came out to be the main centre of this realisation of talent refinement (27%), followed by industrial attachment or internships (18%), secondary school (15%), workplace (11%), and primary school (4%). The key role of parents in career choice was also evident, 17% having been influenced by parents, 6.5% by teachers, and 3.7% by mentors.

The relevance of the skills acquired from formal education was unfavourably scored by 51%, 8% stating they were not skilled enough to match the job market at all and 43% stating they needed major retraining, reskilling and upskilling at workplace. Opinion is highly divided in terms of the market- and future-readiness of skills, hence the need to enhance outcomes through well-targeted and talent-matching skills development for the youth. At the entry level, graduates of different training schools find their knowledge and skills generally not matching the workplace, with a weighted average of 2.15 out of 4 (4 = very wide knowledge and skills mismatch requiring major retraining)

On a scale of 1 (strongly disagree) to 5 (strongly agree), the respondents blamed the education system for youth unemployment, with a mean rating of 3.4 out of 5. The youth recommended curriculum adjustments and labour policy changes to be geared towards impartation of industry-relevant technical and practical skills, exposure to industry through internships for experience, job creation, and adjusting the retirement age to favour youth. The study results showed that attitude towards TVET has been changing positively given the promise for skills and jobs. The majority (79%) of the were ready to give up their university admission to join TVET institutions instead. On a scale of 1 (not at all) to 4 (very readily), the weighted mean of 2.5 out of 4. On the possible effects of digitalisation and automation on their career prospects, there was a general feeling that these megatrends would reduce employment opportunities for the youth. On a scale of 1 (highly reducing employment and job security) to 5 (highly increasing employment opportunities and job security), the weighted mean came to 2.7 out of 5.

Though 82% of the respondents rated mentorship as important to employability skills, 70% did not know of any structured mentorship programme in Kenya and 83% were consequently not in any structured mentorship programme. Less than half of them had regular individual mentors in the form of: career mentors (48%), spiritual mentors (41%), academic mentors (27%), peer mentors (23%), and reverse mentors (7%).

The findings show wide differences in budget requirements between rural and urban schools and between public and private schools. To deliver on the main study objective of enhancing the quality of STEM education in Kenya by optimising transition rates from primary (Standard 7 and 8) to secondary school, findings on the high-leverage points were: increased investment in learning resources, especially laboratories and libraries to facilitate fascinating and practical STEM education; quality teacher training, motivation and exposure to enhance STEM teaching; enhanced annual budgets for gender-differentiated needs, with sanitary and extra maintenance requirements raising the estimated annual budget per girl, learning materials inclusive, to 750 USD — far above a boy's estimated annual requirement of 410 USD; improving the trained teacher/pupil ratio; overcoming cultural barriers to gender equality in STEM education; and structured STEM mentorship for talent management and career development. The budget requirements captured in the survey excluded transport and boarding facilities.

#### Speaker's Profile

Nashon J. Adero, a university lecturer, is a geospatial engineering and systems modelling expert with cross-sector experience spanning the geomatics industry and policy research and analysis. He recently co-edited a timely book published by IREN Kenya, *The Future of Africa in the Post-COVID-19 World* (April 2021). Besides publishing on geospatial technologies and applied system dynamics, he is active in thought leadership and networking across international expert groups. He is a member of the System Dynamics Society (SDS), The Global Academy (SDGs), Elsevier Researcher Academy, The Future of Research Communications and e-Scholarship (FORCE11), among others. Founder of the Impact Borderless Digital (IBD) youth mentorship programme, he doubles as a volunteer mentor under Kenya's Presidential Digital Talent Programme and Enactus Kenya. Among the international awards he has won are the 2020 ACCESS Idea Competition for African academia on Employability Promotion at Higher Education Institutions in Africa and the 2008 Barry Richmond Award for System Thinking.

## Acknowledgement

The research received a major boost in November 2020 as the African Centre for Career Enhancement and Skills Support (ACCESS) "University of Ideas" selected this idea on *"Addressing youth unemployment by matching lifelong skills development needs with talents and labour market demographics*" for further development. The long-term vision is to institutionalise and sustain collaborative talent management as well as STEM-oriented thought leadership and youth mentorship – for enhanced youth employment and job creation outcomes in Africa.