

THE IMPACT OF COVID -19 PANDEMIC ON TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING IN NIGERIA

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Abstract

Coronavirus Diseases (Covid-19) outbreak poses serious concerns to technical and vocational Education & Training (TVET). Efforts to contain covid-19 prompted unscheduled closure of schools in more than 180 countries worldwide. Covid-19 school closures left over one billion learners out of school. This study investigates the origin of Covid 19 pandemic, its impact on technical and vocational Education & Training (TVET), the emerging issues (on-line learning, mobile learning) and possible solution to improve on TVET against the likelihood of pandemic in the nearest future. This study concludes that advancement and development in technology brought about useable tools employed in Technical Vocational Education and Training (TVET) during the pandemic period, it has really become easier to obtain knowledge and Acquire skills through online classes, correspondence courses and video and audio chips. Students across the globe are increasingly self-reliant and self-taught owing to these emerging tools and have favoured the rise of startup in Africa continent.

Key words: Covid -19, TVET, Emerging Issues

INTRODUCTION

Technical-Vocational Education and Training (TVET) is the education or training process which involves in addition to general education, the study of technologies and related science and acquisition of practical skills relating to occupation in various sector of economic life and social life, comprises (organized programs as part of the school system) and non-formal (organized classes outside the school system) approaches (UNESCO & ILO, 2001).

Also, the key purpose is preparation of youth for work, which takes the form of learning and developing work related skill and mastery of underlying knowledge and scientific principles.

Covid-19 on its own as part of concerned system as it affects TVET globally can only be discussed here extensively in its forms, definition, origin, impact and how to improve on our TVET (Technical Vocational Education and Training) in order to avert likely damages/consequences it may likely pose on the educational/Vocational Training.

Corona virus Disease is a contagious diseases, first emerged in wuhan, China in 2019. It was later coded “Covid-19” by the W.H.O which stands for Coronavirus Disease 2019. The outbreak of the virus remains one of the worst global pandemic for decades (W.H.O, 2020). The mortality rate soared and ease of spread was so upsetting. The disease spreads from person to person through infected, air droplets that are projected during sneezing or coughing. It can also be transmitted when humans have contact with infected animals, surfaces that contains the virus and touch their eyes, nose or mouth with the contaminated hands.

It has been revealed by W.H.O. (2020) that the older people and those with underlying medical problem like cardiovascular diseases, diabetes, chronic respiratory diseases and cancer were more likely to develop serious illness from Coronavirus. Some of the symptoms of Coronavirus include sore throat, runny nose, constant coughing sneezing breathing difficult, fatigue fever, headache, muscle pains and chills (W.H.O, 2020). It should also be noted that these symptoms are likely to occur 2-14 days after expose to the virus

Effects of Corona virus on School Closures

Invariably, school closures means the closing of school as a result of pandemic, emergencies, labour strike, disasters or deliberate effort to reposition a school or curb crime in a given community. It means that school closures are not only for emergencies or pandemic but also as deliberate attempt of addressing identified gap in a given institution.

Gewetz (2009) cited in Ben, Mathew and Kristen (2010) reported that Obama’s administration endorsed closure as part of array of strategies to turn around 5,000 failing schools in United State. Although school closures sometime may be for good reason, but the recent school closures for Coronavirus is detrimental to many educational systems across the globe.

Wikipedia (2020b) reported that as at 23rd March, 2020 over 1.3 trillion learners were out of school due to school closures in response to covid-19.

According to Erica & Nichola (2020) the closures can either be reactive or proactive, as reactive closing schools occur upon the discovery of coronavirus case among the students, staff or parents while proactive school closures occurs before the disease even reaches the door of the schools.

Also, school closures due to Corona virus has posed new problems like how to make the transition to online learning, and how to cater for those who rely on school for food and housing security. (Madeline, 2020). It increases burden on parents especially those with limited digital skills education, those that lack resources for continued education and also burden on parents to not only struggle for the livelihood but also to perform the supervisory roles of ensuring that their children learn from home.

According to UNESCO (2020b) some of the harmful effects of school closures for COVID-19 pandemic are as follows interrupted learning, Nutrition, Unequal access to digital portal and social isolation

Covid-19 Impact on Education

The coronavirus pandemic has affected educational systems worldwide, leading to the total closure of schools, universities and colleges (UNESCO, 2020).

Unarguably, governments around the world have temporarily closed educational institutions in an attempt to flatten the spread of covid-19 (UNESCO, 2020).

Approximately, 1.277 billions learners as of 4th September, 2020 are currently affected due to school closures in response to the pandemic. According to UNICEF monitoring, 46 countries are currently implementing local closures, impacting about 72.9 percent of the world's student population (UNESCO, 2020).

Also, a statement released by Cambridge International Examination (CIE) on March 23, 2020 announcing the cancellation of Cambridge IGCSE,, Cambridge O'level, Cambridge International AS&A level, Cambridge AICE Diploma amongst others is showed setback caused by the coronavirus pandemic (Cambridge International, 2020).

However, school closures impact not only students, teachers, and families (Bao et.al, 2020) but have far reaching economic and societal consequences.

School closures in response to the pandemic have equally shed light on various social and economic issues, including, digital learning, food insecurity and homelessness as well as access to childcare, health care, housing, internet and disability services (Jemerson J. & Mitchell J, 2020).

Although, previous outbreaks of infectious disease have prompted widespread schools closings around the world, with varying levels of effectiveness (Cinon, M. 2020, Barnum, M. 2020, Frieden, T. 2020). The impact of this closure was more severe for the disadvantaged children and their families causing interrupted learning compromised nutrition, childcare problems and consequent economic cost to the families who could not work (UNESCO, 2020).

However, it should also be noted that efforts to slow the spread of covid-19 through non-pharmaceutical interventions and preventive measure such as social distancing and self-isolation have prompted the widespread closure of schools such as primary, secondary and tertiary schooling in over 180 countries (UNESCO, 2020).

During the 1918-1919 influenza pandemic in the United States, school closures and public gathering bans were associated with lower total mortality rates (25) it was also noted at the period that cities that implemented such intervention earlier had greater delays in reaching peak mortality rates [Jackson et. al, 2013, Markel, et.al, 2007].

School closed for median duration of 4 weeks according to a study of 43 US cities' response to the Spanish flu (Markel, et. Al, 2007). In addition, school closures were shown to reduce morbidity from the Asian flu by 90% during the 1957-58 outbreaks (38) and up to 50% in controlling influenza in the US, 2004-2008 (Wheeler et. al 2010).

Moreso, during the swine flu outbreak in 2009, in the UK, in an article titled "Closure of schools during an influenza pandemic" published in the lancet infectious diseases, a group of epidemiologist endorsed the closure of schools in order to interrupt the course of the infection, slow further spread and buy time to research and produce vaccine (Wardrop, M. 2009).

INDIRECT IMPACT OF PANDEMIC ON EDUCATIONAL SYSTEM

Apart from its direct impact on schooling, the pandemic impacts include the possible use of school facilities as make-shift hospitals, as in some low-infrastructure rural areas the school may be the only public building available, this may result into lengthened disruption of education services making the building unavailable for education purposes (UNESCO, 2020).

However, the practice of offering alternative services of remote learning may work better for students in households with better connectivity and with higher initial digital skills, so school closures with unplanned and inappropriate system coping mechanism might imply inequality in education.

Emerging Trends Employed During Covid-19 Pandemic

The recent outbreak of coronavirus pandemic has really embraced the growing influence of technology on education. Many educational institutions across the globe relied on the use of technologies to enhance continued education during the pandemic period (Charles et. al, 2020). All countries are setting up an online environment ranging from using very simple messaging services such as whatsapp (e.g. when learners do not have a computer at home) or through other more elaborate IT learning platforms or even using national television for broadcasting (e.g. Ogun State digiclass) and replacing usual classroom lessons.

Truly, the effects of school closures due to covid-19 were mitigated by educational institutions that had supportive e-learning facilities during the crisis. For instance, some institutions in Nigeria (The Federal Polytechnic, Ilaro) provided online education and trainings for their student and staff during the covid-19 lockdown, through the use of institution's e-learning environment codenamed "myccu.ccu.edu.ng"

According to Onyeme (2019a), the inclusion of emerging technologies in teaching and learning process is no longer a choice but a need to; changing learning atmosphere, demand for flexibility in methodology, and the need to enhance creativity and productivity in learning.

Also, emerging technologies have spawned the exponential development of software and AI-aided technology that aim to adapt learning methods and customize curricula to fit each student's ability to move forward at his or her own pace (Corinne, 2018) Onyema et. al, (2019) reported that technology have modify teacher's method from traditional approach where they act more as facilitators, mentors and motivators to inspire students to participate and learn.

The use of appropriate educational technologies increase the accessibility to learning resources and multiple learning approaches to meet the need of diverse learners (Onyeme et. al, 2019a)

There are emerging trends in use of technology in learning such as Nano learning (n-learning), distance learning (d-learning) ,flexible learning (f-learning) , electronic learning (e-learning), blended learning (b-learning) and the recent addition (mobile) in learning (International of surveyors (fig. 2010).

Currently, trends in education have confirmed that instructors are shifting away from authoritarian and non-interactive methods (Glay et. al, 2011), to a more learners centered approach that includes the use of technology.

E-learning platform facilitates continued education during unplanned school closures or pandemics which delayed a lot of educational activities preventing students from graduation (Onyema et. al, 2019b).

Examples of E-learning platforms include:

- Udemy
- Coursera
- Edx
- Easyclass
- Blackboard
- Digital chalk
- Moodle
- Sakai
- Canvas
- Educadium
- Thinkific
- Skillshare
- Podia
- Learnopia
- Schoology
- Vedamo
- TED-ed

Challenges of E-learning

Despite the enormous benefits encompassed in e-learning as emerging trend during the covid-19 pandemic, it has its own challenges for both students and teachers, particularly for those without previous knowledge of digital learning. It involves a lot of time and attention. According to Sylwia (2016), e-learning is an innovative method of education but it should be introduced gradually to enable students and teacher adapts to it properly.

Some of the major challenges of e-learning implementation include:

- Energy/Electricity supply
- Availability and accessibility issue
- Affordability issues
- Network issues
- Insufficient skill or expertise
- Attitudinal issues
- Time constraints

Conclusion

Advancement and development in technology brought about useable tools employed in Technical Vocational Education and Training (TVET) during the pandemic period, it has really become easier to obtain knowledge and acquire skills through online classes, correspondence courses and video and audio chips. Students across the globe are increasingly self-reliant and self-taught owing to these emerging tools and have favoured the rise of startup in Africa continent

Recommendations

This study recommends that urgent crisis and disaster response plans be integrated with centre management mechanism and the use of ICT to ensure that there is continuity of Technical and vocational education and training in case of any eventualities.

The covid-19 pandemic should really encourage countries most especially developing countries to increase their political commitment to the implementation of TVET development plans.

Developing countries can partner up with various IT and telecom companies to help students acquire more IT skill and training.

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