DIGITAL TRANSFORMATION OF EDUCATION DURING AND POST COVID-19 ERA: THE SOCIAL IMPACT ON ADOLESCENTS

Dr Tajuddeen Sa'ad[1], Mr. Ajibola F. O.[2] , Adewusi, O. Victoria[3]

[1]School of Education, University of The Gambia
[2]Department of Physical and Health Education,Federal College of Education Okene, Kogi State
[3]Department of Physical and Health Education, Federal College of Education Okene, Kogi State

ABSTRACT

The study was premised on investigating the impact of digital transformation on the education system in Nigeria especially during and post COVID-19 with adolescents being the focus. This study utilized a well- structured survey method, the questionnaires was prepared through Google Forms, and a total of 840 undergraduate students participated in this survey. All the data collected have been analyzed and presented in the form of tables. Statistical percentage was applied in the analysis of the data. From the findings therefore, it was confirmed that overuse of technology has negative social impact on young people. The findings revealed that although technology during COVID-19 has positive impacts on academic improvement on the students, it can also negatively affect their mental health. The study also found that the increasing dependency on technology can have detrimental effects on the nation's health.
KEYWORDS: *Digital Transformation, Education, COVID-19 Era, Social Impact, Adolescents*

INTRODUCTION

The outbreak of the pandemic disease is a global phenomenal occurrence that has ravaged the people at a cataclysmic rate (Audu, 2022), it has caused large-scale institutional and behavioural 'shock effects' in various areas of human activity including education (Teras, Suoranta, Teräs and Curcher, 2020). The covid-19 pandemic affected educational systems worldwide, leading to the near-total closure of schools. In response to school closures, world organizations such as UNESCO, United Nations (UN), International Association of Association universities (IAU) and World Health Organization (WHO) recommended the use of distance learning programs, open educational applications and other e-learning platforms that institutions and teachers could use to reach learners remotely and limit the disruption of education (Zizek, 2020).

More than 1 billion and 575 million students in approximately 188 countries around the world are reported to have been affected by the closure of schools and universities due to preventive measures taken by countries against the spread of COVID-19 (UNESCO, 2020). Also, multiple lines of evidence indicate that the COVID-19 pandemic has profound psychological and social effects (Sher, 2020). Hyseni-Duraku and Hoxha (2020) however stated that, despite the declared changes and concerns, the early implementation of remote and online learning has been confirmed to have been positively assessed during this period, keeping students engaged and distracting them from the pandemic.

Technology is seen as a basis of educational development of any nation as no educational system can arise above her technological advancement in today's scenario (Raja & Nagasubramani, 2018). Therefore, 21st century education system is said to be technology-driven owing to the fact that technologies are included in curriculum design, teaching and learning processes (Osinem, 2020). Technology has made it possible for schools to offer online education for quite some time and the number of students taking online courses has been on the rise, but not until the arrival of COVID-19 has the majority of education been offered through this mode.

Although the shift to online learning has already become part of many education systems in the world, the level of use and the way technology is used to achieve the quality of distance or online learning is considered to vary. This level depends on many factors, related to the various parties involved in the implementation of this learning format and the integration of technology in education systems before the school closure period as a result of the COVID-19 pandemic. During Lockdown, Governments, education systems, and schools offered remote learning and teaching without much preparation, planning, and in some cases, digital experience (Kamanetz 2020; Sun et al. 2020). However, the changes or innovations that occurred in the immediate days and weeks when COVID-19 struck are not necessarily the changes education needs to make in the face of massive societal changes in a post-COVID-19 world (Zhao & Watterston, 2021).

Therefore, since the outbreak of the pandemic, the compulsory adoption of information and communication technology (ICT) in the educational sector worldwide is a major tool that helps students and staff to cope with the "New Normal" (Guiney, 2011 and Godswill, 2016). This implies that the educational sector in Nigeria is greatly affected by the COVID-19 pandemic and with the increasing digital transformation process in the education, there's is bound to be some major negative effects on young people. Hence, a real-time survey was conducted to try to respond to this question on a large group of adolescents across Nigeria. The aim was to detect the negative effects induced by the overuse of technology in learning during post-COVID 19.

METHODOLOGY

This cross-sectional study involved a nationally representative sample of 840 adolescents. Data were collected with the survey titled "COVID-19, Technology and Adolescents. Random selection of school classes was performed based on a stratified multistage according to a factorial design that considered the geographic distribution (North, East, West, South,) and, within each area, the size of the population. Students were invited to fill in all the sections of the questionnaire, which were applicable. Four thematic areas were investigated through a short online questionnaire using the four ways technology has negatively changed education. Alhumaid (2019) listed that the usual socio-personal variables such as age, gender, and geographical location. Students were invited to fill in all the sections of the questionnaire, which were applicable.

RESULTS

The results provided interesting information about the adolescents' reactions to the increasing use of technology post-COVID-19. As regards negative impact on the three basic skills in learning, the majority of adolescents declared that to a little extent technology negatively impacts reading, writing and arithmetic skills, a third "some extent" (Table 1). In this sense, the adolescents' tendency, more in males than females, to a perception of the danger was not confirmed, majority of the students agreed that e-resources could be quickly accessed and easy to read. In this respect, adolescents from the north and west geopolitical zone also were less inclined to believe that technology could negatively affect the basic skills in learning (Table 2). Young people were more realistic by sharing technology allows for cyberbullying and harassment and online grooming (Table 3). The second interesting result was that the judgment on the influence of technology on social inequalities expressed by adolescents (residing in the north and west regions, was almost equaled (Table 4), although in the south and west zones, majority of the adolescent agreed (Table 5). In other words, technology has made it possible for schools to offer online education for quite some time and the number of students taking online courses has been on the rise, but not until the arrival of COVID-19 has the majority of education been offeredss through this mode (Zhao & Watterston).

Table 1 Table of contingency of degree of the negative impact on the three basic skills in learning

		Gender		
		Female	Male	
Negative impact on the three basic skills in learning	To full extent	17.5%	12.3%	14.9%
	To little extent	39.7%	47.3%	43.5%
	To some extent	37.1%	33.9%	35.5%
	Not at all	5.6%	6.5%	6.1%
Total		100%	100%	100%

Table 2 Table of contingency of degree of the impact on the three basic skills in learning: The West vs North

		Zone		
		West	North	
Negative impact on the three basic skills in learning	To full extent	20.7%	19.4%	20.2%
	To little extent	27%	28.6%	27.6%
	To some extent	17.2%	12%	15.2%
	Not at all	35.1%	40%	37%
Total		100%	100%	100%

Table 3 Table of contingency of degree of dehumanizing effect of technology

		Gender		
		Female	Male	
Dehumanizing effect of technology	To full extent	39.1%	22.5%	31.9%
	To little extent	15.2%	23.5%	18.6%
	To some extent	33.1%	38.8%	35.7%
	Not at all	12.6%	15.2%	13.8%
Total		100%	100%	100%

Table 4 Table of contingency of judgment of the influence on social inequalities

		Zones		
		North	East	
The influence on social inequalities	Strongly Agree	15.2%	22.5%	18.6%
	Agree	39.1%	23.5%	31.9%
	Can't say	12.6%	15.2%	13.8%
	Disagree	33.1%	38.8%	35.7%
Total		100%	100%	100%

Table 5 Table of contingency of judgment of the influence on social inequalities: West vs South

		Zones		
		West	South	
The influence on social inequalities	Strongly Agree	25.5%	30.6%	27.6%
	Agree	43.1%	40%	41.9%
	Can't say	9.1%	18.8%	13.6%
	Disagree	22.3%	10.6%	16.9%
Total		100%	100%	100%

Table 6 Table of contingency of degree of technology and isolation

		Gender		
		Female	Male	
Technology and isolation	To full extent	33.1%	25.8%	29.8%
	To little extent	13.2%	23.5%	19%
	To some extent	29.4%	31.1%	30%
	Not at all	24.3%	19.6%	22.1%
Total		100%	100%	100%

DISCUSSION

The current research highlighted the remarkable and undoubtedly expected, effects of digital transformation in the education of the new generations. The increasing use technology in learning post-COVID19 pandemic is significantly affecting the emotional, social and behavioral experience in Nigerian adolescents. Adequate information and guidance could give helpful support to cope with this issue. Teachers need to interface with their students, even if they are assisted by TVs, smartphones, feature phones, laptops, and tablets. Google Classroom has developed a whole suite of integrated learning platforms that can be easily linked to YouTube, Lexia, Khan Academy, and other teaching aids. But each platform requires the teacher to create the right learning environment (Iyengar, 2020).

CONCLUSION

Technology has brought unprecedented changes to education system globally. The change that technology brought is revolutionary, not evolutionary, and it affects all stakeholders – students, teachers, administrators, parents, employers and citizens (Osinem, 2020: Jolls, 2008). However, there are many good reasons for the adoption of the increasing use of technology in education, the negative influence should not be ignored and should be considered when implementing the curriculum, if not adequately monitored the purpose could be lost in education and this could prove catastrophic. Although

COVID-19-related concerns and commitments about their children's learning can be overwhelming for parents, and also the teachers in charge of them, the situation created during the pandemic can be considered as a priority in increasing the cooperation of the school with the parents, their support to overcome the challenges related to the school, and at the same time to advance their level of knowledge and technological skills for appropriate support practices in regards to their children, in order to guide and improve behaviors, foster learning, and create a positive approach to school.

RECOMMENDATIONS
The following recommendations should suffice to improve the digitalization of pedagogy in our school system.
1. Adequate information and guidance to students could provide helpful support to cope with challenges of digitalization.
2. Teachers need to interface with their students in terms of psych-social support for the students to master all the necessary technical imperative in digitalization of teaching and learning process.
3. The students need to be assisted in the provision of smartphones, feature phones, laptops, and tablets. Google Classroom has developed a whole suite of integrated learning platforms that can be easily linked to YouTube, Lexia, Khan Academy, and other teaching aids. But each platform requires the teacher to create the right learning environment (Iyengar, 2020).

REFERENCES
1. Audu, M. S. (2022). The role of education in coping with the "new normal " pandemic era for national development. Ataba International Journal on Contemporary Issues. 9(1) 5-11
2. Teräs, M., Suoranta, J., Teräs, H. & Curcher, M., (2020). Post-covid-19 education and education technology 'solutionism': a seller's market. Postdigital Science and Education. 2:863–878 https://doi.org/10.1007/s42438-020-00164-x
3. Zizek, S. (2020). Pandemic! Covid-19 shakes the world. New York, NY: Books.
4. United Nations Educational, Scientific and Cultural Organization.(2020). COVID-19 impact on education data. COVID-19 education disruption and response. Paris, France: The United Nations Educational, Scientific and Cultural Organization, UNESCO.
5. Hyseni-Duraku, Z. & Hoxha, L., (2020). The impact of COVID-19 on education and on the well-being of teachers, parents, and students: Challenges related to remote (online) learning and opportunities for advancing the quality of education.
6. Guiney, P. (2011). E-learning provision and participation: trends Patterns and highlights. Wellington: Ministry of Education
7. Sher L., (2020). Are COVID-19 survivors at increased risk for suicide? Acta Neuropsychiatr 2020; 1.
8. Iyengar R., (2020). Education as the path to a sustainable recovery from COVID-19. Center for Sustainable Development, Earth Institute, Columbia University. 49:77–80 https://doi.org/10.1007/s11125-020-09488-
9. Osinem, C. E. (2020). Social impact of technology-driven education. International Confab Organized by Chartered Institute of Educational Practioners, UK.
10. Zhao Y. & Watterston J. (2020). The changes we need: Education post COVID-19. Journal of Educational Change (2021). 22:3–12 https://doi.org/10.1007/s10833-021-09417-3
11. Kamanetz, A. (2020, March 19). 'Panic-gogy': Teaching online classes during the coronavirus pandemic. NPR. Retrieved from https://www.npr.org/2020/03/19/817885991/panic-gogy-teaching-online-classesduring-the-coronavirus-pandemic
12. Alhumaid, K., (2019). Four ways technology has negatively changed education. Journal of Educational and Social Research. 9(4) E-ISSN 2240-0524 ISSN 2239-978X

doi: 10.1017/neu.2020.21.