IMPACTS OF COVID-19 ON EDUCATIONAL STANDARDS IN GHANA: A CASE OF EMERGENCY REMOTE TEACHING AND ONLINE LEARNINGS

Nyarkoh Patrick Dede[1*] 0009-0006-2524-9920

Doctoral School of Public Administration, Ludovika University of Public Service, Budapest, Hungary
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Abstract

The educational landscape in Ghana was greatly altered during the COVID-19 pandemic, necessitating a sudden shift from traditional face-to-face instruction to online and emergency remote teaching methods. This study examines the impacts of this sudden shift on educational standards in Ghana, focusing on challenges, inequities, and systemic disruptions experienced during and after the COVID-19 pandemic. Employing a qualitative research design grounded in document analysis, Findings showed that the shift to online learning exposed and worsened pre-existing inequities, especially between urban and rural students, due to disparities in access to reliable internet and technological devices. The unpreparedness of teachers and students for online instruction resulted in trial-and-error teaching methods, leading to decreased engagement and reduced learning outcomes. Overall, the findings revealed that the shift to emergency remote teaching created technological access, pedagogical adaptation, and instructional quality challenges, with significant consequences for cognitive and practical learning outcomes. There is a need for continuous efforts to bridge the digital divide, prioritize professional development in digital literacy for educators, and develop alternative assessment methods to address cheating and ensure the resilience of Ghana's education system amidst technological disruptions. These outcomes provide critical evidence for policymakers aiming to create future equitable, inclusive, and sustainable digital learning environments.

1. Introduction

Education in Ghana has its roots in pre-colonial times when information was passed down from elders to younger people [1]. This form of education was devoid of writing, reading, and arithmetic and was solely informal and indigenous [2]. Western education was brought to Ghana in the 16th and 19th centuries by European traders and Christian missionaries in the then Gold Coast [3,4]. Reading, writing, and math were taught as part of this educational program, which aimed to produce educated natives who could work as clerks and storekeepers in business, industry, and government.

Due to the lack of significant technological advancements during this time, instruction was still provided through the conventional face-to-face method [5]. Following the Gold Coast's

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[*] Corresponding author. Tel.: +36206225126
E-mail address: padeny4u@yahoo.com

independence, a new indigenous government was elected, and among its goals were to open up access to Western-style education for all and raise the standard of education provided in the nation [1]. These reforms included several educational changes with the ultimate aim of educating the ordinary Ghanaian.

The mode of education continued with the conventional in-person format until 1983 when progress in technology led to the advent of the Internet [6]. Again, the face of education changed in Ghana with the increasing number of students applying for admission declined due mainly to lack of educational infrastructure like classrooms and accommodation. Based on this, remote and virtual learning was progressively integrated into the Ghanaian educational system [7]. This was mostly tertiary institutions that had satellite campuses across the county. In the year 2007, some institutions in Ghana introduced distance education programs because of increasing globalization, advances in technology, and changing student demographics among others. In response to these at the tertiary level, distance education has become popular. Notwithstanding the emergence of the internet and other technological advancements, a greater part of the mode of education in Ghana persisted in the usual face-to-face approach until COVID-19 was pronounced a global pandemic.

The mode through which education was delivered in Ghana rapidly transformed when the World Health Organization (WHO) declared the novel coronavirus a global pandemic in 2020. Many educational institutions were forced to explore alternate means of delivering education. This was made essential by the deployment of safety strategies and protocols like lockdowns to curb the spread of the virus. It is noteworthy that before COVID-19, distance education was already in existence where students converged on various campuses to write exams and tests as such but with the advent of COVID-19, the entire educational apparatus was moved from the traditional face-to-face mode to an online one, raising questions concerning the quality of education delivered during the period. This inquiry is still relevant today since most instructors and students were ill-prepared to shift from traditional in-person instruction to online learning, which presented difficulties at the time [8]. The educational landscape in Ghana was altered during the COVID-19 pandemic and largely exposed systemic challenges such as technological inequalities, inadequate preparedness on the part of teachers as well as learners, and increased academic dishonesty among students. These challenges necessitated the urgent need to assess the short and long-term effects of this sudden change in the mode of instruction on the quality of education. Understanding the impacts will allow policymakers and educators to address the barriers to ensure a sustained digital learning environment.

The study focuses on assessing the impacts of COVID-19 on education standards in Ghana based on the mode that was employed during the global pandemic. Qualitative research design, particularly document analysis was used and this assisted in evaluating selected electronic documents from databases published on education, educational reforms, and modes of education during the Covid-19 pandemic; specific databases used were Googlescholar, Science Direct, and PsycINFO. Keywords were drawn from the research aim, and these databases were scanned for papers that reported on a topic that borders on the nature of education in Ghana during COVID-19 and beyond. From this, findings reported by these papers were interpreted thematically to understand and report on the quality of education provided in Ghana during and after the COVID-19 pandemic.

2. Challenges of online learning during covid-19

Notwithstanding the necessity of shifting the educational system from the traditional face-to-face mode to an online one during the COVID-19 pandemic, some challenges were reported, with the most widely discussed one being the cost involved in partaking in an online class [9]. Students were forced to incur unexpected expenses when purchasing data bundles to partake in class during the period. This meant that those who could not afford it had to miss classes in between, ultimately affecting the nature of the education they received during the period. Another challenge was the unpreparedness and lack of formal orientation before the commencement of this mode of teaching and learning, leading to challenges in navigating the system used in delivering the lessons [10].

Again, it has been reported that students were reluctant to dedicate time or effort to unassessed academic work, which is what online learning and teaching offers them [11]. Issues with time and the target audience for online learning and teaching are also but a few challenges arise during online education [12, 13]. In a developing country like Ghana, poor socio-economic factors have hindered technological growth in parts of the country thereby cutting off an entire section of the country from the online mode of teaching and learning during the Covid-19 pandemic, raising questions on the accessibility of education delivered during the period.

Figure (1) below shows the percentage of Ghanaians who had access to communication devices before the COVID-19 pandemic as reported by Afro Barometer. Scrutiny reveals that access to computers had the smallest percentages, the main device used in online learning and teaching.
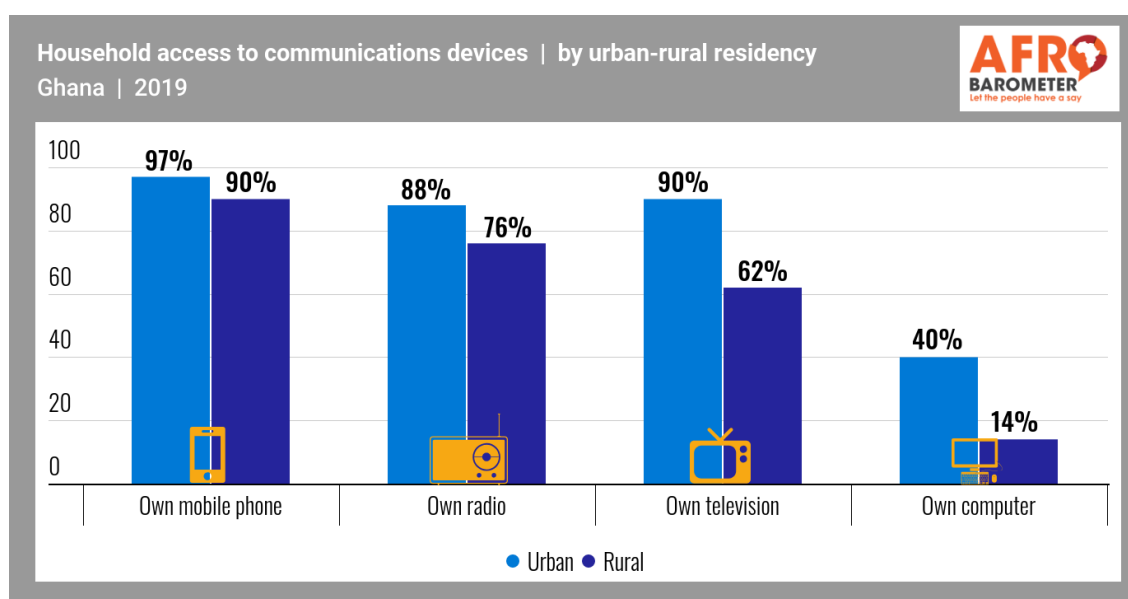

Figure 1. Graphic presentation of household access to communication devices in Ghana Source: Afro Barometer, 2019

A study by Omari et al. [1] revealed an interesting finding. From their work, results showed that students reported better academic performance during the online mode of teaching and learning brought about by the COVID-19 pandemic, but this was fuelled by students cheating during online exams. The lack of supervision in exams meant that students had the luxury of discussing exam questions with their colleagues. Others also seek answers to their exam questions on Google and other search engines. While this behavior is fine for research purposes, it becomes challenging when tutors aim to assess what students have been taught, thereby clouding students' real performances during the COVID-19 pandemic.

Owing to the systemic challenges that were revealed by the COVID-19 pandemic, it has become necessary to ensure a more sustained digital learning environment; doing so demands more actionable solutions to overcome the barriers. Unequal access to technology can be dealt with by expanding the digital infrastructure in Ghana, this can be achieved by the government in partnership with private individuals, and by so doing connectivity will be widened thereby bringing improved connectivity and equitable access. Again, all devices that aid online learning must be made affordable so that less privileged people can have access to them which invariably will bring inclusivity. Issues concerning teacher's unpreparedness can be addressed through professional development in digital pedagogy which will geared toward digital literacy and effective online teaching methods.

Dishonesty amongst students can also be addressed by reevaluating assessment methods, this is viable by adopting alternative assessments that deal with formative rather than examination-based evaluations and this can take the form of portfolio assessments, peer assessments, etc., cheating can also be curbed by integrating proctoring tools during online examinations.

3. Emergency Remote Teaching and online learning

While the term 'online teaching and learning' has been used and confused with 'emergency remote teaching', these terms are not the same [14]. Remote teaching and learning come through meticulous instructional design and planning, in which a systematic model is employed for its design and development. A learning community that helps students not only academically but also through extracurricular activities and other social supports is the goal of effective online programs. Planning, development, and preparation for a completely online university course often take six to nine months before the course is given [15]. As a result, online delivery is intended from the start for virtual teaching and learning. Because of this, meticulous preparation for online learning involves not just deciding what material to cover but also thinking through how various interaction kinds would be encouraged and given priority [14]. On the flip side, emergency remote teaching and learning entails a temporary move to an alternate instructional method due to emergencies [16]. This entails using fully remote teaching methods for education that would typically be conducted in person, with a return to face-to-face instruction once the crisis subsides [15].

Emergency remote learning aims to offer temporary instructional access and support that can be quickly established and consistently available during a crisis, without the intention of replicating a comprehensive educational system. This type of teaching demands innovative problem-solving and may utilize methods like mobile learning, radio, or blended formats [15]. This method of instruction is generally intended to be short-term and leaves students and faculty with little option to opt in or out. This shows that the mode of teaching and learning adopted during the Covid-19 pandemic was one of 'emergency remote teaching and learning' rather than the branded 'online learning and teaching'.

Again, it is seen that emergency remote teaching and learning is a temporal form of delivering educational instructions, but some institutions still run this mode of teaching and learning in Ghana. Covid-19 pushed educational institutions to embrace e-learning. Course instructors were expected to develop a new modus operandi to deliver their education services which influenced the quality of education delivered. The analysis of documents revealed varied impacts on the standard of education during covid-19 pandemic in Ghana particularly with emergency remote teaching and online learning as modes of delivering. Access and equity became an issue during the pandemic because there was a wide gap that existed between the two divides of dwellers in Ghana (urban and rural). Most rural dwellers found it very challenging to join classes online as a result of poor network connection whereas this was the opposite for their counterparts in the urban centers, this largely impacted cognitive outcomes regarding dropping off from virtual classes leading to less comprehension of the lesson taught. It was also discovered that a large number of participants in online classes hamper discussions as many simultaneous talkers who do not know when to submit can obstruct the learning process.

From the document analyses, it was observed that lack of concentration was a result of breakages in the network connection and also caused most students to skip materials. Ghana education has been the traditional face-to-face mode however, the COVID-19 pandemic brought changes in the teaching and learning process. There was a sudden shift in the pedagogy that demanded a change and since most teachers were not conversant with digital platforms teachings, most teachings were done on trial an error basis which invariably affected the learning experience of the students because there was a drastic reduction in students' engagement as teachers struggled to sustained students interest throughout the lessons. The review also brought to bear the behavior of students concentrating on only academically assessed lessons at the expense of one that has no bearing on their grades and this ideally affected the holistic development of the learners since education aims at developing the totality of human beings.

The transformation also greatly impacted the practical aspects of teaching and learning during the COVID-19 pandemic, because most of these practical lessons were postponed or poorly carried out on digital platforms that denied students hands-on skills. Another noticeable impact of this shift was on academic dishonesty, it was discovered that students sought answers from Google and other educational platforms to questions during online examinations.

4. Conclusion.

The onset of the COVID-19 pandemic has reshaped the educational system in Ghana, which has been the traditional face-to-face approach. The shift that came as a result of the pandemic revealed systemic challenges and disparities that existed between urban and rural students and this has generated discussion on the sustainability and inclusivity of online education in Ghana.

In the Ghanaian context, the analysis revealed that the emergency model lacks a solid instructional framework. The digital divide as a result of unequal access to reliable internet and technological devices greatly affected students in rural areas leading to educational inequalities. The gap that existed not only impacted on continuity of learning but also affected cognitive development as most students in the rural areas where connectivity was a major problem were compelled to disengage with the learning process which invariably reduced comprehension.

The pandemic-driven transformation brought enormous challenges in line with the pedagogy as most teachers who were not familiar with digital platform teaching had to adjust rapidly which resulted in a trial-and-error approach; this unpreparedness compromised the quality of instructional delivery and reduced the level of student engagement. Another problematic issue that the study revealed was students giving priority to only academically assessed content which ideally undermines education's comprehensive goal. Again, practical aspects of education were critical for many fields that were abandoned or poorly handled on the digital platform leading to a lack of hands-on skills which are vital for professional development. The increase in academic dishonesty during online examinations raises concern about the integrity of education and academic achievement during the pandemic. Conclusively, the impacts of the COVID-19 pandemic on Ghana's educational standards demand a reevaluation of how technology can be effectively integrated into the educational system.

References

[1] Omari, E. B., Salifu Yendork, J., and Ankrah, E.: University students' perspectives on the benefits and challenges of emergency remote teaching during the Covid-19 pandemic in Ghana. Education and Information Technologies, 2022, Vol. 28, No. 5, pp. 6093-6113. DOI: https://doi.org/10.1007/s10639-022-11401-0

[2] Adu-Agyem, J., and Osei-Poku, P.: Quality education in Ghana: The way forward. International Journal of Innovative Research and Development, 2012, Vol. 1, No. 9, pp. 164–177.

[3] Debrunner, H. W.: A history of Christianity in Ghana. Accra, Ghana: Waterville Publishing House, 1967

[4] McWilliam H.O.A. & Kwamena-Poh, M.A.:The development of education in Ghana. London: Longman. 1975.

[5] Graham, C. K.: The history of education in Ghana: From the earliest to the declaration of independence. New York: Routledge, 1971.

[6] Siemens, G., Gašević, D., & Dawson, S.: Preparing for the Digital University: A review of the history and current state of distance, blended, and online learning, 2015, DOI: https://doi.org/10.13140/ RG.2.1.3515.8483.

[7] Marfo, J. S., and Okine, R. K.: Implementation of e-learning in Ghanaian tertiary institutions: A case study of KNUST, 2010, Retrieved from DOI: https://linc.mit.edu/linc2010/proceedings/session6Kabutey.pdf

[8] Owusu-Fordjour, C., Koomson, C. K., and Hanson, D.: The impact of Covid-19 on the learning perspective of the Ghanaian student. European Journal of Education Studies, 2020, Vol. 7, No. 3, pp. 88–101. DOI: https://doi.org/10.46827/ejesv0i0.3000

[9] Demuyakor, J.: Coronavirus (Covid-19) and online learning in higher institutions of education: A survey of the perceptions of Ghanaian international students in China. Online Journal of Communication and Media Technologies, 2020, Vol. 10 No. (3), DOI: e202018. https://doi.org/10.29333/ojcmt/8286

[10] Agormedah, E. K., Henaku, E. A., Ayite, D. M. K., and Ansah, E. A.: Online learning in higher education during Covid-19 pandemic: A case of Ghana. Journal of Educational Technology and Online Learning, 2020, Vol. 3, No. 3, pp. 183–210. DOI: https://doi.org/10.31681/jetol.726441

[11] Ang, A., Hodrick, R. J., Xing, Y., and Zhang, X.: High idiosyncratic volatility and low returns: International and further U.S. evidence. Journal of Financial Economics, 2009, Vol. 91, No. 1, pp. 1–23. DOI:https://doi. org/10.1016/j.jfineco.2007.12.005

[12] Barker, V.: Older adolescents' motivations for social network site use: The influence of gender, group identity, and collective self-esteem. Cyberpsychology & Behavior, 2009, Vol. 12, No. 2, pp. 209–213. DOI: https://doi. org/10.1089/cpb.2008.0228

[13] Serdyukov, P., & Serdyukova, N.: Time as a factor of success in online learning. Journal of Information Technology and Application in Education,2012, Vol. 1, No. 2, pp. 40–46

[14] Erlam, G. D., Garrett, N., Gasteigner, N., Lau, K., Hoare, K., Agarwal, S., and Haxell, A.: What matters: Experiences of emergency remote teaching in university teaching and learning during the Covid-19 pandemic. Frontiers in Education, 2021, Vol. 6, No. 639842, DOI: https://doi.org/10.3389/feduc.2021.639842

[15] Hodges, C., Moore, S., Lockee, B., Trust, T., and Bond, A.: The difference between emergency remote teaching and online learning. Educause Review 2020, Retrieved from https://er.educause.edu/ articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning [10.08.2024]

[16] Iglesias-Pradas, S., Hernandez-Garcia, A., Chaparro-Peleaez, J., and Prieto, J. L.: Emergency remote teaching and students' academic performance in higher education during the Covid-19 pandemic: A case study. Computers in Human Behaviour, 2021, Vol. 119, No. 106713. DOI: https://doi.org/10.1016/j.chb.2021.106713