

## **Covid-19, e-learning and psychosocial support for students: matters arising from Ghana and USA**

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**Abstract:** The technology boom over the past two decades led to an increase in the use of technology at every level of our educational system. Although the internet is being utilized much more worldwide, there are groups in our society that still do not have easy and open access to the internet. The pandemic has had far-reaching effects on students in the education arena. Black and Brown students have been severely affected due to many suffering from lack of sufficient technical and academic support.

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### **Introduction**

In 2020 most academic institutions around the world were forced to temporarily close, or make major adjustments at the institution in an attempt to contain the spread of the novel coronavirus also referred to as Covid-19 pandemic. Covid-19 is an ongoing epidemic that was first identified in China city of Wuhan in December 2019 (Singh et al., 2020). COVID-19 is caused by severe acute respiratory syndrome and is primarily spread between people during close contact, often through small droplets produced by coughing, sneezing, and talking. People may also become infected by touching a contaminated surface and then touching their face. Common symptoms include fever, cough, fatigue, shortness of breath, and loss of smell, taste (Jebril, 2020). Complications may include pneumonia and acute respiratory distress syndrome. Recommended preventive measures include hand washing, covering one's mouth when coughing, practicing social distance, wearing a face mask in public settings, and monitoring and self-isolation for people who suspect they are infected. Because of the rapid nature of the spread to other continents and countries, WHO by January 2020 declared it as the world's most dangerous pandemic and a public health emergency of international concern.

Globally, as of **January 23, 2021**, there have been 390,951 new cases, **96,658,420 confirmed cases** of COVID-19 including **2,092,062 deaths** reported to WHO in over 219 countries and territories with the United States of America being the highest hit with 88,176 new cases, 24,413,337 confirmed, and 406,782 deaths (Weekly Epidemiological Update - 19 January 2021). Ghana referred to as one of the high-risk countries in Africa has 59,480 confirmed cases and 361 deaths (*Ghana Country Overview | World Health Organization*, n.d.). Of these figures, more than 1.2 million people have recovered globally though. To combat the onslaught of the covid-19 virus, governments around the world have closed and or downsized all sectors of schools. These global closures are affecting over 72% of the world's student population. Several countries have implemented localized closures impacting millions of additional learners (UNICEF, 2020). In the wake of indefinite closures and classroom reduction of schools with academics hanging in the balance, most teachers have resorted to e-learning methods to assist their students.

The pandemic has far reaching effects on students in the education arena. Black and Brown students have been severely affected due to many suffering from lack of sufficient technical and academic support. Many students have verbalized their displeasure with the transition to fully online / distance learning. Faculty and students in higher education complain about the smoothness in the transition to online instruction. Most of the complaints appear to be associated with the technical and academic adjustments to the online modality.

The technology boom over the past two decades led to an increase in the use of technology at every level of our educational system. The use of the Internet to facilitate teaching and learning processes are an integral part of our day-to-day pedagogical approach to education. Although the use of the internet is currently being utilized more worldwide, compared to 20 years ago, there are groups in our society that still do not have easy and open access to the internet.

Low-income families in both developed and developing countries, particularly blacks and Latinos, are

still faced with a serious digital divide. Although this divide is being narrowed with the access to smartphones, full access is still limited when it comes to academic tools e.g., tablets, notebooks/laptops and wideband internet connectivity for educational purposes.

Puckett (2020) discussed the problem of unequal access to online learning platforms in the United States. According to the author, there are three basic areas of concern for students and faculty: Readiness of educators and students to engage in online learning, scaling how to reward students for their work, and robustness of global technology. These are areas of quandary for any level of online teaching and learning.

The unexpected thrust into remote learning was an additional catastrophic event for many students and faculty alike. While faculty scrambled to prepare and transition from face-face delivery to an online platform, many low-income students battled with online access and integrating the use of their technical devices for classroom learning. The digital divide faced by US minority students became more glaring at the onset of the pandemic (Brimmer 2020). To some, this is an alarming realization, considering the fact that we live in one of the wealthiest countries in the world. The impact of this disparity on the education of young people can no longer be ignored.

Anderson and Perrin (2018) noted that many US low-income families do not have internet access, and approximately 15 percent of US school age children do not have high speed internet access. The authors stated that one in five school-aged children misses homework due to lack of internet access. This reality is much worse on an international level, since internet access and connectivity are issues for many countries. For example, according to the 2019 World Bank report, lack of internet access, poor connectivity, and affordability are major internet issues all over the African continent.

With these challenges associated with e-learning in the midst of Covid-19 across the globe, we asked, "How are teachers and learners coping with academic work with particular emphasis on e-learning in Ghana and the USA?"

This study attempts to explore the possibilities and challenges of e-learning (teaching and learning) by tertiary students and their teachers in Ghana and the United States of America, their coping strategies and psychosocial support for e-learning. The final paper will take a chronological overview of the development of covid-19 cases in both countries, the impact on tertiary education, and availability of psychosocial support for e-learning. It will draw some conclusions about implications for education and psychology.

### **Methodology**

Our study will be cross-sectional, through a convenience, non-probability sampling technique in Ghana and the USA. We will adopt this sampling in respecting health protocols on Covid-19 among which are social distancing in avoiding contacts to collect data from two universities one from each of the countries. In Ghana, the University of Education, Winneba is selected while CUNY Medgar Evers College is selected in the USA. This convenience technique will allow us to select respondents directly from the populations as per their convenience. We will produce and distribute a researcher-designed questionnaire to collect relevant data of participants through the online survey tool Google Form, a professional online survey evaluation and voting platform. Google Form permits questionnaire design, data collection, custom reporting and analysis of results. The questionnaire will be disseminated through known WhatsApp, e-mails and other social media platforms.

Four independent education professionals from both countries evaluated the initial draft of the researcher-designed questionnaire for face validity in which changes were made according to their feedback and comments. The final form of the questionnaire consists of five sections. The first section addresses respondents' socio-demographic profile such as country/nationality, university, gender, age, education level, program of study, level/year, place of residence, marital status and so forth.

Section two includes nine questions exploring what e-learning approaches students and lecturers use. Questions in this section will assess the information on the various e-learning tools that respondents have been exposed to, mode of transmission/instruction, and the availability of the approaches. Each correct answer will be rated with a score of 1, and for an incorrect response (wrong answer or "do not know"), a score of 0 will be awarded. Thus, the total score for e-learning approaches will range between 0 and 9 points. The third section of the questionnaire contains fifteen questions with "yes"; "no"; or "not sure" choices. This section will evaluate the effectiveness of e-learning approaches that students were exposed to during the covid19 pandemic in terms of their knowledge, level of skills to manage these tools, and the ability to carry out academic work. Those who answer "yes" will be given a 1 point score, while those not prepared or not sure will be awarded a score of 0. Accordingly, the total score for effectiveness will range between 0 and 15.

Section four contains six questions on a 5-point Likert scale (never "1", rarely "2", sometimes "3", usually "4" and always "5"). Questions in this section will evaluate the potential barriers and challenges that students face in their migration from face-to-face teaching and learning to online learning during COVID-19 and school closures. The last section will analyze eight questions on the psychosocial support that students receive to

manage the challenges associated with e-learning during COVID-19.

The chi-squared test will be used to investigate the level of association among variables. A 'p value' of less than 0.05 will be considered statistically significant. Factor analysis with principal component analysis will be used to describe the unobserved underlying latent variables. Bartlett's test of sphericity will be used to check interdependency among the items and KMO(Kaiser–Meyer–Olkin measure of sampling adequacy) will be used to inspect the sample sufficiency (Kaiser & Rice, 1974). To check the items' internal consistency (reliability index), Cronbach's  $\alpha$  (Cronbach, 1984) value will be calculated and checked.

### **Ethical Approval**

The study protocol and procedures of informed consent will be granted ethical approval by at least one of the universities involved in the study before the formal survey is conducted. Since this study will utilize Google survey, an online informed consent form will be on the first page of the questionnaire. Participants will be informed about the contents of the questionnaire, and they will be asked to answer a yes/no question to confirm their willingness to participate voluntarily. All responses will be anonymous.

### **Scholarly Significance**

This study will help to shed light on the educational needs of low-income students needing technology and social support during this current COVID-19 pandemic crisis.

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