

## **The Economic Impact of covid-19 on Distance Students in Ghana; A case of University of Education – Institute of Distance Education and eLearning**

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### **Abstract**

This study sought to investigate the impact of covid-19 on distance students in Ghana. The study used qualitative technique which was a major departure from previous study. The study used a sample size of 16 students made up of 8 males and 8 females and conducted an online interview (to allow for social distancing) session for 20 minutes. The method of triangulation to check the credibility and validity of research findings was employed. The study found that covid-19 has brought about additional expenses including, but not limited to, purchase of internet connectivity phones, purchase of laptops, repairs of laptop, purchase of additional data, purchase of modems and routers, purchases of additional phone credit for conference calls and subject discussion with colleague and home learning environment on students. Again, the study found that covid-19 has brought about increased living expenses cost and unplanned budget spending which has affected their academics negatively. The study recommends that school authorities should consider softer methods in fees collection and also grant fees rebate to deserving students.

**Keywords:** Covid-19, Economic Impact, Distance Students

### 1.1 Introduction

Coronavirus has changed the world. According to World Health Organization (WHO), the total number of confirmed cases was 77,228,903 and total number of deaths stood at 1,718,479 as at December, 2020. Countries that have been hardly hit by the virus include United States, India, Brazil, Russia, France, United Kingdom, Italy and Spain. These countries together account for 44,484,203 of total confirmed cases and 956,651 of total confirmed deaths (<https://covid19.who.int/table>). Even though the situation in Africa sharply differs from what pertains in Europe and America, the continent has also had its fair share of confirmed cases and deaths. Total number of confirmed cases stood at 1,756,690 as at December 2020 (WHO, 2020). This virus has caused people around the world to change and adapt to new ways of doing things in almost every aspect of human life. The virus has changed the way we bank, educate, entertain, approach health issue, and go about in tourism, shaped our governments etc. For instance individual do not celebrate and walk in groups any longer, we are told to wear mask, wash our hands and maintain social distancing (self-hygiene), we are told to self-isolate if one finds symptoms of covid and quickly seek medical attention. Even our mode of delivering medical care has changed from running to a medical facility to staying home and calling for help.

Such changes have also affected our mode of educational delivery. In fact covid-19 has disrupted academic calendars for most countries around the world. The number of students whose educational activities were affected was around 300 million in March 2020 and the number reached 1.6 billion in April 2020(Hebebcı, 2020).In Ghana, kindergarten, lower primary and upper primary children have been asked to stay home for more than eight month without going through the traditional system of education (President's address on Covid-19, 2020). Same situation could be said for other countries such as Nigeria, Cote d'ivore, Togo, South Africa and Sierra Leon.

In Ghana, the announcement of closure of schools caused authorities in higher education especially, public and private universities to find new way of teaching and reaching their students to try and mitigate the impact of such closures. This brought about the widespread use of internet and technology adoption in learning and teaching. Government of Ghana through the Ministry of Education provided free online services, online learning platform ([icampusgh.com](http://icampusgh.com)) and virtual learning through airing of educational content on television and

radio stations across the country. Again, the government through its ministry facilitated zero-rating of most educational platform for many tertiary institutions (Anti, 2020). This was basically meant to reduce cost of data for many students and help in continuing education in the mist of the pandemic. Distance mode of learning became the new order. According to Eygu & Karaman, (2013); Moore, Deane & Galyen, (2011), Distance education is a computer-based teaching method in which students and teachers interact from certain centers where classroom education cannot be performed due to limitations in general education and training process. The benefits of distance education could clearly be seen which include but not limited to ensuring the sustainability of education, providing lifelong learning and reducing educational costs. Reforms as a result of covid-19 affected all forms of education. Distance students in higher education were not left out. But the question is ‘what are the effects of covid-19 on the economic conditions of distance students’? This question is worth investigating into because; the current technological trend in education as presented by covid-19 has warranted new cost build up for distance students.

The objective of this study therefore is to investigate the economic impact of covid-19 on distance students using University of Education Institute of Distance Education and eLearning as the case study. This study differs from existing studies in two main aspects; firstly, this study used qualitative method in analyzing and ascertaining the economic effects, Secondly, the study was conducted in Africa (Ghana in particular) where it appears limited study has been conducted especially with the use of qualitative methods.

## 2.1 Literature Review

In recent past, researchers have worked on effects of Covid-19 on various aspects of human life. On the educational front, researchers such as Arfan et al(2020), Gallo & Trompetto (2020), Akat&Karatas (2020), Donthu& Gustafsson (2020), Sintema (2020), Konig et al (2020) etc have worked on various aspects. Major areas of research on effects of covid-19 been carried out in the educational sector include eLearning, medical education, research in education, changes in educational policies and actions, performance of students in the era of pandemics, entrepreneurship education, teacher education and teacher competence.

Covid-19 undoubtedly has brought about an increase in electronic learning. Arfan et al (2020) identified five main factors affecting the use of eLearning. These are service quality, system quality, information quality, user satisfaction, system use and eLearning portal success. Using partial least square structural equation model, the authors identified system quality and information as main factors that affect use of eLearning in the male model and e-service quality and information quality in the female model.

In the area of medical education, attention has been drawn to the support of a robust public health response to the pandemic, adaption of curriculum to current issues in real time, graduating a class of well-prepared physicians each year on time and without lowering standards, protecting limited educational resources and treating learners equitably, engaging in crisis communication and active change leadership (Catherine and Claiborne, 2020). With regard to research in education, issues of social distancing have caused leaders of educational institution to think through how students and teacher would be connected. According to Donthu and Gustafsson (2020), spatial interaction is becoming the new standard and way of life, and the blurring of physical and virtual communication is likely to continue until covid-19 is over. Globally, the higher educational system would undergo a decade of radical technology-led transformation. Researchers have identified modern trends in educational delivery that is likely to ensue after covid. The trends are Algorithm as Professor, the University as a Service, the University as Assessment Powerhouse, Learning Personalization to Support Diversity and Problem Solving through Ethical Inquiry.

Covid-19 has brought about major educational reforms across the world. Some of the major reforms common among countries are Free Internet Access to Students, Live Courses for Students in lower and upper primaries, Revision of the High-School Entrance Examination Content, Supporting the Professional Development of Teachers via Distance Education, Supporting the Psychological Resilience and Well-being of Students and Parents, Increasing the Production Capacity of Vocational Education and Training (Mahmut, 2020) and provision of Personal Protective Equipment.

Covid-19 has affected students' academic performance all over. According to Emma and Elaine (2020), because the pandemic has decreased learning time and caused chronic absenteeism, advancement in students' academic performance has decreased. The Organization for Economic Co-operation and Development (OECE) estimates that students'

average academic performance was between 0.3 standard deviations (SD) and 0.5 SD to 0.7 SD per year. But this performance reduced by 0.1 SD across the world in this covid era. This is instructive because Figlio, Holden, and Özek (2018); Thmposon (2019) found that there is a positive relationship between extending school hour and improvement in reading score. A similar analysis could be made for absenteeism and students performance. Allensworth and Evans (2016) found that each week of absence per semester is associated with a more than 20% decline in the probability of graduating from school. García and Weiss (2018) also found that the disadvantage associated with absenteeism grows as the number of days missed increases: students who missed 1–2 school days, 3–4 days, 5–10 days, or more than 10 days scored, respectively, 0.10, 0.29, 0.39, and 0.64 SD below students who missed no school.

Covid-19 has also exposed the issue of teacher education and teacher competence. Because of the adoption of technology in teaching and learning, the need for computer-based interaction has been of paramount interest because of social distancing. Teachers therefore are expected to exhibit knowledge in the use of technology in teaching and assessing students. Previously, teacher competence was defined as context-specific cognitive performance dispositions that are functionally responsive to situations and demands in certain domains' (Kaiser and König 2019). The emphasis of teacher competence was modeled around professional knowledge, cognition and affective motivational areas. Common areas in teacher competence that was considered include content knowledge (CK), pedagogical content knowledge (PCK), and general pedagogical knowledge (GPK) (Guerriero, 2017). With increased adoption of Information and Communication (ICT) in the teaching and learning process, teacher competence has been expanded to include knowledge required to teach students using ICT. The best-known approach was developed by Mishra and Koehler (2006), who defined teachers' technological knowledge (TK) in addition to CK, PCK, and GPK. This implies that apart from the teacher acquiring knowledge in specific subject areas, they should be able to apply technologies to pedagogical concepts and teaching practice. Just like teacher competence, the definition of teacher education has also been expanded to include ICT curriculum integration. Schools as well as teachers and universities are expected to adopt this framework for ICT integration into the curriculum.

One variance of higher education is distance education. Apart from these general educational researches in relation to Covid, researchers have narrowed down on impact of Covid-19 on distance education. Mustafa et al (2020) investigated views of students and teachers on distance education practices during the Coronavirus (COVID-19) pandemic. The views of students on distance education were put together under five themes. These include views on distance education, advantages and disadvantages of distance education, problems encountered in distance education, education and training process and effects of distance education. Some of the important problems enumerated by students are absence of teachers, lack of time and inadequacy of lesson, Longing for the classroom environment, lack of understanding of lessons thought (speed of lectures), problem of adapting to home environment for teaching and learning. The views of students however, were not only negative. There were some positive opinions as well. Positive views such as continuity by the use of technology, at least there is teaching and learning activity, awareness and experience etc. were shared. The views of teachers on distance education were also put together under five themes. These are opinions on distance education, advantages and disadvantages, effect on education process and student, course and content, view on the future of distance education and technology. The teachers also gave major problems of distance education as interaction and productivity problems, technical and infrastructure problems, short duration of the lessons and out-of-class activities and insufficient time.

In assessing the impact of Covid on distance education, Sindiani et al (2020) found that one of the most important aspects of distance education is the maintenance of social distance, while poor technical setup and no direct contact with teachers were the most disadvantages. Bergdahl & Nouri (2020) found similar results even though the authors added teachers' lack of pedagogical strategies as one disadvantages of the merging trend. These studies tried to assess the impact of Covid on distance education in general. It appears as if the economic situation of students who are directly involved in teaching and learning has been ignored. Again, many of these studies are conducted in areas outside Ghana. This study sought to fill these gaps by considering the economic impact of Covid on students involved in distance education using the Ghanaian context.

### 3.1 Methodology

The research design employed for this study was qualitative research. This is the major point of departure from other studies. According to Al-Busaidi (2005) qualitative research include a range of explanatory methods which seek to describe, decipher, translate and otherwise come to terms with the meaning, not frequency of certain more or less naturally occurring phenomena in the social world. Gilbert (2008) also noted that qualitative research aims to investigate and analyze specific problems by describing scenes, gathering data through interviews, or analyzing the meaning of documents. The reason for choosing qualitative methodology was because it is most appropriate in terms of the emphasis on people's lived experience and its ability to achieve an in-depth understanding of a situation. In this study, we are mostly interested in the economic impact of covid-19 pandemic and students' coping strategies. Using numbers would not reveal students' true experience hence this methodology.

#### *3.3.1 Population, Sampling technique, Data Collection,*

The sources of data collection for qualitative study include people (individuals and/or groups), organizations, tests, settings and environments (visual/sensory and virtual materials), objects, artifacts, media products, events and happenings. For the purpose of this study, we shall focus of two main sources of data collection. That is people (individual) and organizations (Institute of Distance Education and eLearning).

In other to ensure credibility and validity of research findings, the researcher used triangulation especially data triangulation, investigator triangulation and methodological triangulation (Denzin, 1970). With data triangulation, researchers gathered data in a time period of two months to capture students' change in circumstance. With investigator triangulation, researchers employed three (3) different investigators to conduct interviews to ensure correct recording of response. With methodological triangulation, researchers employed two main types of data collection methods – individuals and Focus Groups (where all individuals involved were put in a group) and different projective techniques to achieve appropriate data were used. The aim of triangulation is to use different methods to achieve the same results that give more confidence in the research findings.

Population of the study was entire students of Institute of Distance and eLearning of University of Education, Winneba. In qualitative research, one general sampling technique exists: that is keep sampling as long as your breadth and depth of knowledge of subject under consideration keep expanding; stop when you gain no new knowledge or insight. A pilot sampling activity conducted by researchers using investigator triangulation revealed that after the 16<sup>th</sup> person interviewed, no new knowledge was gained on the subject of study. That is, responses to questions became repetitive. The researchers therefore used a sample size of 16 for the study. This sample size was made up of 2 males and females students from each level (level 100 to level 400).

Sampling techniques used were two non-probability techniques - purposive and convenience sampling. Purposive sampling technique generally is used when participants are selected based in their experiences, attitudes, perceptions and unique characteristics (Palinkas et al, 2015). The study purposively selected two male and female students each from level 100 to 400. Again, these students fell in working class. Convenience sampling is generally the selection of any readily available individuals as participants (Palinkas et al, 2015). Because the specific categorizations of respondent were readily available, researchers used convenience sampling to select for interview sections.

Data collection was done by two main methods – interviews and focus group. Interview is the primary data collection technique for gathering data in qualitative methodologies (Gill, 2008). The study employed individual depth interview in the first step where the interviewers were trained to make respondents feel comfortable, probe for details without making responded feel harassed, remain neutral, listen carefully and follow participant train of thought. Because of the purpose of the study and set target, researchers adopted a structure interview where a detailed set of questionnaires were used but remain open-ended. Because of covid-19 and issues regarding social distancing, the interview was conducted via video online (this is preferred choice because interviewer needed to observe participants demine). Individual depth interview generally took 20 minutes to complete.

After the individual depth interview, a second stage interview section using group interview was conducted as a means of triangulation. Basically, data collection through group interview uses a single interviewer with more than one research participant (Gill, 2008). The composition of group interview was all members used in individual depth interview making it



a supergroup. Because of the nature of sampling technique used, the composition was homogenous in terms of identification as students and heterogeneous in terms of gender, work and level, ethnicity and religion and marital status. One of the main problems encountered with this interview section was constant break in connectivity. On two occasions, the interview section had to be called off. But this was corrected when respondents were provided with reliable source of internet connection.

#### 4.1 Results and Analyses

##### *Demographics Characteristics*

As already stated above, the total number of respondent was sixteen (16). This was made up of two (2) males and females from each level. Thus the percentage of males and female was 50percent. The table below describes the demographic characteristics of respondent.

*Table 1: Demographic Characteristics of Respondents*

<b>Variables</b>	<b>Category</b>	<b>Percentage</b>
<b>Sex</b>	Female	50
	Male	50
<b>Age</b>	26-33	64.7
	34-41	29.6
	42-49	5.7
<b>Marital Status</b>	Married	39.6
	Single	60.4
<b>Employment Status</b>	Employed	69.2
	Unemployed	30.8
<b>Category of Program</b>	Advanced Diploma	9.5
	Bachelor	74.6
	Post-Graduate Diploma	15.9

Source: Field Survey, 2021

With regards to age, 64 percent of respondents were aged between 26-33 years, 29.6 percent were between the ages of 34-41 and 5.7 percent were above 41 years. From the table 60.4 percent of the respondents were single and 39.6 percent were marriage. On the employment

status 69.2 percent were employed and 30.8 percent were unemployed. It must be stated that, these percentage do not deviate very much from other studies. For example Mensah et al (2020) found that student aged between 26-33 was 62.2 percent. Again, the percentage of single students was 62.8 and percentage of students employed was 69.2. The study referred to used a sample size of 725. Analyses of the responses are given below.

*i. What additional expenses has Covid-19 brought on you?*

Respondent stated the following as additional expenses as a results of the pandemic: purchase of internet connectivity phones, purchase of laptops, desktop computers and accessories, repairs of laptop, purchase of additional data, purchase of modems and routers, additional transportation to places with good internet connections, purchases of additional phone credit for conference calls and subject discussion with colleague and home learning environment. Respondents bemoaned that these additional expenses are really having a toll on budget especially for students who also have families. One respondent stated that *‘Now I have to buy so much data and credit. I use the credit to call my friends and ask them to explain certain things to me. Now that the children are not going to school, they eat a lot. Sometimes I don’t know whether to use my money for food or credit. It’s not easy at all’*. Another female respondent stated that *‘Because of this Covid-19, I have to go and buy a laptop. But the most painful part is that because the network in my area is bad, I have to go to a male friend to do my assignment and exercises and exam. Imagine the transport fair. The most painful thing is that my husband is even suspecting me’*.

One problem that most respondent did not attempt to find solution to is their home learning environment. The respondents who attempted to address this problem complained about the prices of items such as study tables, chairs etc. because demand for such items increased.

These financial problems is not only limited to students in Ghana. Di Pietro et al (2020), found that about 10 percent of students did not have access to either a device or internet in UK. In the US, about 17 percent of students did not have a computer at home and 18 percent of students lacked broadband internet access.

**ii. Were you able to participate in the online teaching?**

All respondents stated that they participated in online teaching but was quick to add that there were a lot of problems. A male respondent stated that *'Yes I participated, but it was almost like I did not participate.'* The respondents stated problems such as poor internet connectivity, unfriendly Learning Management System (LMS) user interface, a complete absence of video lectures especially during practical sections and teacher competence in using ICT support systems to teach. A female respondent stated that *'this online teaching is like a hell to some of us. I remember a lecturer wanted to have a zoom meeting with us and the lecturer himself even could not connect. The LMS we are using could not also support video meeting'*. One respondent also added *'I almost cried when I was using this online system to write my exam'*. The problems related to online teaching could be seen everywhere. In Germany for example, teacher education and teacher competence in online education has come to the limelight (Konig et al, 2020). Even though the respondents stated that they participated, further probes suggest that they could not participate fully as much as they wanted. On a scale of 1 to 10, when asked to rank their participation, the average participate score was five (5). Apart from connectivity problems, the respondent stated spending on data and credit as problems that hindered their participation.

**iii. Have you been able to pay your fees to assess your results? If No why?**

Out of sixteen (16) respondent, ten (10) stated that they have been able to pay their fees to access their results. Six (6) respondents stated that they have not been able to pay their fees. When asked why, the respondent gave reasons such as non-payment of salaries, increased cost as a result of the pandemic and unplanned budget expenses. One respondent stated that *'I used the money I gathered to purchase the laptop I am using for this online thing. My employers are also complaining of reduced sales and they have not paid us. I don't know where to get money to pay for the fees'*. Another respondent stated that *'my expense has increased because of this pandemic that I have to spend extra money in buying personal protective equipment and immune booster drugs for myself and family. The school fees will have to wait for sometimes'*.

iv. ***Would you say that the Covid-19 has affected your finance as a Distance Student?***

All sixteen (16) respondents stated that Covid-19 has affected their finance and stress that it has affected them negatively. Their entire budget plan has been thrown in disarray. Adjustment in planning their budget has been very difficult. A male respondent stated that *'this covid-19 has caused a lot of problems. Planning a budget has been very difficult. Previously, it was easy to put school fees first when planning a budget. This time you can't just do that.'*

v. ***In which areas of your academic life have been affected?***

Respondent stated that the main areas of their academic life that have been affected includes purchase of books and relevant materials because the monies have been diverted into buying data and phone credit, non-payment of fees which has a psychological burden on students and difficulty of the online education systems. A female respondent stated that *'it is very difficult to sometimes understand what is being thought with this online system. I don't get anything'*. Another respondent stated that *'we cannot even meet to have a fruitful discussion on the various subjects. This is not really helping me because I tend to understand the subject better when my colleagues explain it to me. I tried to do it on phone but the cost is too much for me'*.

vi. ***What in your opinion do you think should be done about the current Economic Impact.***

All sixteen respondents agreed that school authorities have a role to play in mitigating the impact on students. The two most dominate suggestion put forward include softer method and longer time space in payment of fees and fees rebate to most affected students. One female participant noted that *'The authorities should give us time to pay the fees. They know how difficult things are for us. They shouldn't use short time and force on us. If they do that, it will stress us the more. They should even not take fees from some of our colleagues because it's not easy'*.

## 5.0 Conclusion

This study sought to find out the economic impact of covid-19 on distance students in Ghana. The study used qualitative methods in analyzing the impact with was a major diversion from other previous study which used purely quantitative technique. The study found that covid-19 has brought additional cost namely purchase of internet connectivity phones, purchase of laptops, desktop computers and accessories, repairs of laptop, purchase of additional data, purchase of modems and routers, additional transportation to places with good internet connections, purchases of additional phone credit for conference calls and subject discussion with colleague and home learning environment on students. The study also found that covid-19 has affected the finances of students and thrown their budget in disarray. School authorities should therefore use other soft methods in fees collection. These methods could include but not limited to allowing reasoning time for students to pay their fees and considering rebate to seriously affected students.

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