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### **Assessment of COVID-19 on Primary Education in Ghana**

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#### **Abstract**

In the wake of the global novel coronavirus (COVID-19) pandemic, it is abundantly clear to all educational institutions the necessity of studying in the physical classroom and widespread health consequences associated with the virus. However, what is much less clear is the impact of COVID-19 on Primary education in Ghana.

Already, facilitators and pupils were grappling with the implementation of the Standard-based Curriculum 2019 coupled with the non-availability of approved textbooks for all the subjects. When the School's academic year 2019/2020 began in September 2019, school administrators, facilitators, parents and pupils had great challenge in understanding the objectives, content, methodology and evaluation approach in the new curriculum introduced. The new curriculum introduced new subjects such as History and Our World Our People into Primary Education in Ghana. However, when School Administrators, facilitators, parents and pupils were getting a better understanding of the Standard-based Curriculum in the second term of the School year, the President of Ghana closed all Educational Institutions suddenly due to the presence of COVID-19 in the country. The closure of the Primary Schools took place at the time when the pupils were preparing for their end of second term examinations for both public and private schools, just a few weeks to end the second term. A research was conducted on the assessment of COVID-19 on the Primary Education in Ghana. A survey of Mass Media was conducted and in the survey, News items, Report and Interview on education and educational stakeholders from television and radio stations were collected. The radio stations were Peace FM, Citi FM, Joy FM, Adom FM and Oman FM. The television stations were Adom TV, UTV, TV3, GTV, Joy News, Metro TV, and Joy Prime. Furthermore, the BBC was added to get the global perspective on how Education in Ghana responded to the COVID-19 pandemic.

**Keywords: Assessment, COVID-19 pandemic, Distance education, facilitator, Pedagogy, Public school, Private school, Pupils.**

## **Introduction**

In the region of Wuhan, China, a new (novel) coronavirus began appearing in human beings in the beginning of December 2019. The World Health Organisation (WHO) has shortened the name “coronavirus disease” as COVID-19. The COVID-19 is a viral disease which spreads incredibly quickly among people because no one on earth has immunity to Covid-19. Ghana and the rest of the world saw COVID-19 as an epidemic in China from December 2019 to January 2020. However, the virus spread worldwide within months and the World Health Organization (WHO) declared Covid-19 a pandemic in March 2020. By the end of March 2020, the world saw more than a half-million people infected and nearly 30,000 deaths. Pandemic comes from the Greek word pandemic, “pan” meaning “all” and “demos” meaning “the people”. This word is commonly used to refer to a widespread epidemic of contagious disease throughout the whole of a country or one or more continents at the same time [1]. The Dictionary of Epidemiology gave the meaning of pandemic as an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people [2]. On the 12th of March 2020, Ghana recorded two cases of COVID- 19 infection in the country and subsequently, the President of Ghana declared a closure of all educational institutions from the Basic to the tertiary levels on 16th March 2020. The children, pupils, students, and facilitators have stayed home for more than two months without teaching and learning going on in the brick-and-mortar classroom (physical classroom). This writeup assessed COVID-19 pandemic on Primary Education in Ghana.

## **Method**

Mass Media survey was conducted on the five radio stations and seven television stations in the Greater Accra region of Ghana. The radio stations were Peace FM, Citi FM, Joy FM, Adom FM and Oman FM. The television stations were Adom TV, UTV, TV3, GTV, Joy News, Metro TV, and Joy Prime. Furthermore, the BBC was added to get the global perspective on how Education in Ghana responded to the COVID-19 pandemic. The survey captured every News and Reports from each radio and television station on Primary education in Ghana from 16th March 2020 to 16th May 2020. Moreover, interviews conducted on radios and television stations with the stakeholders of education like the Ministry of Education, Private school owners, facilitators, educationists, parents, children and other players in the educational industry were captured. The data collected covered the length and breadth of Ghana because most of the radio and television stations had sister stations in other parts of the Ghana which brought news, reports and interviews from the national, regional and district education offices. Meanwhile, observation of pupils’ behaviour towards learning likewise that of private school owners and facilitators was made in Accra Metro and other educational districts and municipalities.

The data collected from television and radio stations interviews covered interviews with the Minister of Education, Deputy Minister of Education, leadership of Ghana National Association of Teachers (GNAT), leadership of the Private Schools Association Ghana, Heads of Private Schools, public and private schools’ teachers, leaderships of Parents Teachers Association, parents and Private School owners. The data that was collected from the television and radio stations news report covered the response of children to distance education, how the Ministry of Education was engaging all children of school going age on the distance education from region to region. It also covered how the Private Schools were engaging their pupils on the various virtual learning platforms. The results from the survey covered how the public and private schools were prepared toward the COVID-19 pandemic in Ghana and the engagement of their pupils during the closure of schools from 16th March 2020 in the Distance Education. Other issues such as the challenges in the implementation of the distance education, participation of pupils in the distance education and assessment of learners during the home-schooling.

## Results

Taking a critical look at the secondary sources of data by reading relevant journals, listening to radio interviews and watching television interviews with various Educationists including the top hierarchy of GES and Private School owners and observing the situational response of both Public and Private Schools on how the Primary school educators had responded to the spread of the COVID 19 during the closure of schools in Ghana. The following results were obtained:

1. Preparedness of the Primary Educational System.
2. Distance Education
3. Challenges of the distance education
4. Participation of Pupils in the Distance Education
5. Assessment of learners.

## Discussions

The following gives detailed discussions on the results obtained.

### 1. Preparedness of the educational system

In 1957, Ghana gained its independence from the British and it was the first African country to the south of the Sahara to gain independence from colonial rule. The nation Ghana is made up of 92,000 square miles which is about 238,000 square kilometres. The country shares boundaries with three French-speaking nations such as the Côte d'Ivoire to the west, Burkina Faso to the north, and Togo to the east. Moreover, the south of the country is blessed with the Gulf of Guinea of the Atlantic Ocean.

In modern day Ghana, the running of the education system is largely in the hands of the government and the rest is for the Private sector. The Ghana Education Service (GES) is the institution in which the government uses to run education in the country. Formerly, the structure of the educational system was made of Primary education, Secondary education and Higher education. However, the GES is now running Kindergarten education which was previously in the hands of the private school due to the implementation of the Standard Based curriculum in September 2019.

Although the GES has its main focus on the operation of public schools in the country, however, it regulates the operation of private schools. Primary education has six years span and children will spend six years of their life in primary school. The primary schools in Ghana operate the primary education and the GES operates the public primary schools while the private sector operates the private primary school. The primary school is structured from class 1 to class 6 in progression and a child would be allowed to enrol in the primary school when he or she is six years and above. In 2015/2016, the GES conducted a census on the number of schools in the country from Kindergarten to Senior High School. There were 22,052 Kindergarten Schools, 22,289 Primary Schools, 14,767 Junior High Schools, and 876 Senior High Schools in the country.

From the GES census (2016), primary education has the highest schools in the country. For years now, the old instructional delivery approach has been used for both the Public and Private Primary Schools. The teaching and learning usually take place in the physical classroom setting with the facilitator and learners' interaction. However, there were other private schools who had a Learning Management System which has not been utilised.

On 16th March 2020, when the President of Ghana announced the closure of all educational institutions as a result of the nation recording its first two cases of the COVID-19 infections. The announcement from the President was done in the late hours of Sunday and the following Monday showed that none of the Schools had taught that the entire country's schools can be closed down. The feedback from GES and the Private Schools showed that they were not prepared for the COVID-19 in the country. Therefore, the closure of Schools became a total shock to GES, School Managers and School owners.

## 2. Distance Education

In a matter of days, COVID-19 has changed how Primary School pupils are educated across the breadth and length of Ghana. This change gives educators a glimpse at how education could change for the better or worse in the long term.

With the COVID-19 spreading rapidly across the various regions in Ghana such as Greater Accra, Ashante, Central, Eastern, Western, Volta and Northern. The Ministry of Health and other organisations have taken swift and decisive actions to mitigate the development of a full-blown pandemic in Ghana. In the past two months, there have been multiple announcements from the President of Ghana on the suspending attendance at schools and universities. By the end of March 2020, both GES and Private Primary Schools had thought through the situation and had developed distance education for the pupils staying at home.

The GES with the support from the government has rolled up nationwide distance learning through the mass Media such as Television and Radio for the pupils in class 1 to class 6. Moreover, the Private Schools also resulted in the use of media platforms such as WhatsApp, Zoom, Facebooks and other Learning Management Systems like Google class. The television, radio, WhatsApp and Google class are asynchronous while Zoom is synchronous in virtual learning. Furthermore, some Private Primary Schools adopted a blended approach in the Distance Education of their pupils. In this instance, parents come for lesson notes with assignments from the school weekly maybe Mondays.

These risk-control decisions taken by GES and Private Schools have led millions of pupils into temporary 'home-schooling' situations, especially in some of the most heavily impacted regions, like Greater Accra, Ashante, Eastern, Central, and Western. Virtual teaching and learning is ongoing since March 2020 ending with parental support at home for the pupils.

## 3. Challenges of the Distance Education

Although the distance education was an educational innovation from both Public and Private Schools, it has its own challenges.

- a. Curriculum:** With the implementation of the Standard-based Curriculum in the 2019/2020 Academic year, facilitators across the entire county were required to teach the same Strand, sub-strand, content standard or learning indicator to their pupils so that nationwide assessment could be conducted. However, facilitators were not trained adequately coupled with the lack of learning resources like textbooks and facilitator's manual. This created a gap between the level in which a learner in class 1 receiving the curriculum schooling at Kotobabi Primary School (Public School) and another learner in the same class 1 schooling at Mangoasi Primary School (Public School) and another learner in the same class schooling at Holy Trinity Lutheran School (Private School). Designing the curriculum for the distance education for a specific class in the Primary School was a challenge. Some of the Strand, sub-strand, content standard or learning indicators taught were either strange or revision to learners. This made some of the learners to lose interest in distance education through the Television or Radio.

**b. Pedagogy:** This deals with the method or strategy the facilitator used in delivery instruction to learners. In the normal classroom teaching and learning, the facilitator knows his or her learners and adopts customisation in order to achieve the object set for the lesson. Customisation addresses the individual learning challenges and satisfies their learning styles. Moreover, subjects like Mathematics which used the activity-based approach as the pedagogy for delivery the concept, developing the skills, and mastering of skills by the learner. Also, Science as a subject required the facilitator to use the experimental or exploratory approach as the pedagogy. However, some of the facilitators did not use the appropriate pedagogy in delivering the instruction to the learners. Likewise, they did not practise customisation because the lesson was asynchronous. Meanwhile, the facilitators who did synchronous lessons handle the lesson as if they were having a meeting or conference.

**c. Internet Connectivity:** According to Miniwatts Marketing Group (2020), the population of Ghana is 31,072,940 and out of that population 11,737,818 people have access to internet usage. Despite Ghana's commitment to Internet expansion, problems persist. For some years now, the government of Ghana and telecommunication companies are on a mission to improve access to the Internet, however, patchy coverage and high costs are holding back digital participation. In Africa, Ghana was among the first countries to liberalize its telecommunications market. Meanwhile, the first mobile network went into operation in 1992 and within two years, the country had access to the World Wide Web. In recent times, the population of Ghanaians on Internet access speak to the country's rapid transformation. Ghana finalized and legally adopted its ICT Policy for Accelerated Development (ICT4AD) in 2004, which spelt out its vision for the information age. However, the policy could not be enjoyed by all citizens because the digital improvements are predominantly benefiting high earners in urban areas or companies based along the fibre optic infrastructure. Sadly, in the capital, Accra, internet access is still fragmented, and too expensive especially for start-ups. According to William Will Senyo, co-founder and CEO of ImpactHub Accra, there is high speed Internet, but it costs an arm and a leg. It costs you \$15 to \$100,000 dollars a year to have somewhere between 50 and 100 mbps stable high-speed fibre Internet, and how many Ghanaians or companies can afford that? Furthermore, people with a regular income having access to the Internet and with the opportunities for digital participation comes with high costs because the price for 1GB of mobile data volume is just over 2 percent of an average monthly income. The CEO of Soronko Academy, Regina Honu, which runs the Tech Needs Girls mentorship program where they teach primarily women and girls to code and work with technology, was of the view that digital participation in the country remains difficult because "the cost is prohibitive." She hopes that "government initiatives that use the internet to train more people in different places and get more organizations to come in" will drive down the cost. Certainly, the government is aware of the problem of cost because Ghana was the second nation to endorse the "1 for 2" Internet affordability target

Communications Minister Ursula Owusu-Ekuful in 2017, announced Ghana's intention to start working toward "1 for 2," which means that 1GB of mobile broadband for 2 percent or less of an average monthly income which did not see the light of day. These two main problems of internet accessibility and cost became the standing block against the successful implementation of the Distance Education or virtual learning. Most of the parents in the Private Schools kicked against their wards enrolling on the school's Learning Management System because of the internet accessibility and high cost in data usage.

**d. Electricity:** In 2017, the Energy Minister, Minister Boakye Agyarko, said that 84 percent of the population of Ghanaians enjoys access to electricity. The 16 percent of the population left are without electricity which means that the Primary School in that bracket are not part of the Distance Education. Meanwhile, the 84 percent of the Ghanaians with access to electricity do not enjoy its consistency in supply. There have been intermittent

power failures for some, there have been instances where either the electricity power will go off before or during the lesson and it will come back after the lessons have been completed. Others have low electric voltage which makes it very difficult to enjoy the usage of any electrical device. These do not build the interest in the pupils and also, they take advantage of their stay at home to develop the habit of learning on their own without the physical facilitator standing in front of them and giving instructions.

#### 4. Participation of Pupils in the Distance Education

In the normal times, that is when Schools were operating whereby the facilitator and learners interact in the physical classroom. The facilitator's duty is to ensure that pupils have a continuous learning lifestyle by actively engaging them in the teaching and learning activities. The facilitator makes the classroom climate good for the learners by ensuring that the classroom is ready, conducive, schedules every activity, offers affection, shows leadership, motivation and is psychologically ready. Participation of pupils in teaching and learning activity is very critical to the facilitator because he or she gets the feedback from learners to ascertain whether the lesson objectives have been achieved. However, during the closure of schools due to COVID-19 pandemic, children's participation in the distance education became the sole responsibility of parents or guardians. Research has shown that when parents or guardians execute the following responsibilities, their children participate very well in the distance education:

- a) **Build a Time Table:** In the normal classroom environment, the facilitator builds a time table which specify what pupils will do in the day and the week as a whole. The pupils are aware of the time table and ensure that all the daily schedules are executed. They are aware of the time for Mathematics, English Language, Science, recreation, or club activity. Parents or guardians should have a home-based time table for their children. The time table should be a daily activity plan for their children making clear indications on what must be done at a particular period within the day. It is always the best when children are involved in the development of the time table so that they will proudly implement it. Parents or guardians should guide their children to write the time table on a paper and paste in it the appropriate place of the room that they can easily access it. Parents or guardians should ensure that their children are aware that they cannot miss the daily distance education. From interviews observed on the television such as Joy News, TV 3, and GTV, parents mentioned that their children were actively participating in the distance education because they have developed a daily schedule for their children. However, in another interview, children were moving in groups or troupes for games or play from one home or community to another. Sadly, they were not aware of the distance education and not even to talk about their participation.
- b) **Encourage Hard Work and Persistence:** Children learning online or television from home removes many of the systems of accountability that pupils are used to in the traditional classroom. In achieving the same level of success, the child will likely take a higher level of intrinsic motivation and self-directed effort when he or she wants to achieve the set objectives by the parents or guardians. Just like using the time table at the School, this motivation comes more naturally for some children than for others. Although, using online learning platforms, getting used to self-pacing, and working through the normal home environment, productive struggles of learning more independently can be quite a challenge. Therefore, parents or guardians can make a big difference simply by demonstrating how you are managing your work during the COVID-19 pandemic. Children who were aware that learning is continuous and life-long, they were self-motivated and directed towards distance education. However, participation in distance education seemed to be a punishment to children if they are not motivated by their parents or guardians.
- c) **Set up a Learning Workspace:** The tables and chairs in the classroom made the classroom environment conducive for the learning to take place likewise the canteen

setting made the children enjoy their lunch in the School. The appropriate learning workspace makes a huge difference in children's mind-set and ability to concentrate. When participating in distance education, children have the ability to complete their work where they want. Therefore, it is very important for parents or guardians to think about what kind of environment is truly most effective for their children. The learning workspace should be tailor made like the way some schools have made their classrooms multipurpose, that is, for learning and lunch. The home learning workspace should meet the needs of the children and have the necessary tools, materials and equipment, and without distractors. Children did not participate in distance learning because the same learning workspace was used by parents or siblings for other activities.

- d) Know the distance Learning Platform:** Distance education means that children spend their school days immersed in television or online programs. Parents or guardians should watch the television channel and the time for the lessons if the lessons are done on the television. However, if the lessons are done online then parents should be familiar with the online tools so that support can be provided whenever the child needs it. Whenever children get frustrated in accessing lessons either online or television, they lose interest in participating in distance education.
- e) Communication with the facilitator:** Distance education does not mean that the children are learning independently. The school's facilitator still plays an absolutely critical role in television or online learning. Parents or guardians maintaining open, frequent communication is key to children's success. Children participate in the distance education when parents or guardians maintain ongoing dialogue with his or her school facilitator.

## 5. Assessment of learners

The Standard-based Curriculum (2019) has made assessment an integral part to the teaching and learning process. According to Martha L. A. Stassen et al [3], assessment is the systematic collection and analysis of information to improve student learning. Pupils' assessment enables facilitators to measure the effectiveness of their teaching by linking pupils' performance to specific learning outcomes. Wiggins and McTighe [4], were of the opinion that assessment is very important in the pedagogical design that the approach encourages facilitators and curriculum planners. From the Standard Based Curriculum, assessment has been divided into three types: assessment for learning, assessment of learning and assessment as learning. According to McNamee and Chen [5], the philosophy behind assessment for learning is that assessment should be part of teaching and learning. This means that assessment for learning is an ongoing assessment that allows facilitators to monitor learners on a day-to-day basis and change their teaching based on the needs of learners. This type of assessment provides learners with the timely, specific feedback that they need to make progress in their learning. Assessment of learning is also known as summative assessment; it takes place at the end of a period such as end of term examination. This type of assessment provides information about the pupil's achievement and helps school administrators to make decisions about the pupil. And lastly but not the least, assessment as learning develops and supports learner's metacognitive skills. This type of assessment helps pupils to become lifelong learners and it is the spirit of the Standard Based Curriculum (2019). During the closure of schools by the President of Ghana on 16th March 2020, the children were engaged on the various learning platforms such Mass Media, Social Media and Learning Management System. The Mass Media like the television and radio had a huge area coverage because most of the television and radio stations from different regions in Ghana were telecasting or broadcasting it. The assessment of the learning will be classified as "assessment as learning" because the Mass Media promotes lifelong learning among the children. The Ghana Education Service did not put measures in place to be able to assess the distance learning in terms of assessment for learning, and assessment of learning. Therefore, the distance education did not attract seriousness and togetherness from the tripartite;

facilitator, pupil and parent. The public schools did not take full advantage of the distance education due to the lack of assessment approach from the Ministry of Education. However, the story was different from some of the private schools who used the Learning Management System (LMS). The school administrators factored in the three types of assessment in their virtual learning platform. This made the tripartite to actively and constantly engage themselves, and the learner's needs were addressed.

## **Conclusion**

In a matter of months, coronavirus (COVID-19) has changed Primary or Basic Education around the world. The changes in Primary Education gives a glimpse at how education could change for the better or the worse in the long term. Since 16th March 2020, the COVID-19 has spread to all the regions in Ghana with the exception of Ahafo. The regions with the highest infection rates were Greater Accra, Ashante, Eastern, Central, and Western. Although, Ahafo region has not recorded any infection, all the Primary School children in Ghana were at home because Schools have been closed down because of the closure of educational institutions by the President of Ghana. These risk-control decisions taken by the President of Ghana have led millions of pupils into temporary 'home-schooling' situations. These changes have certainly caused a degree of inconvenience to pupils, parents and school administrators. However, it has brought into existence educational innovation which has a lasting impact on the trajectory of learning innovation and digitization in the Primary School in Ghana. The innovation from the government in the area of distance education using the Mass Media such as television and the Private Schools using Social Media and Learning Management Systems were laudable. However, there was not adequate engagement among all the educational stakeholders in Ghana. From the research, government and private school owners were running different programmes and the parents most especially the private school were confused either to use the government or their children's school. As the government distance education was free for all, the private school operated on fees for the pupils. The fee-paying approach from the Private Schools brought a lot of fallout from their parents because the COVID-19 also affected jobs in the country which led to parents having less or no income.

The research identified that COVID-19 in Ghana provided the opportunity for public-private educational partnerships. Elsewhere in the world, learning consortiums and coalitions took shape during the COVID-19 pandemic in countries, with diverse stakeholders including governments, publishers, education professionals, technology providers, and telecom network operators coming together to utilize digital platforms as a temporary solution to the crisis.

However, in Ghana which is an emerging country where education has predominantly been provided by the government, this could become a prevalent and consequential trend to future education. For example, in a country like China, the Ministry of Education assembled a group of diverse constituents to develop a new cloud-based, online learning and broadcasting platform, and upgraded a suite of education infrastructure which was led by the Education Ministry and Ministry of Industry and Information Technology. In Ghana, the Ministry of Education could have taken the leadership role to engage telecom providers, software developers, publishers, education professionals and others to develop a cloud-based, online learning and broadcasting platform with less cost. Learning is continuous, therefore, there should be an assessment system in place from the Ministry of Education that will enable the pupils to progress from home-schooling to the physical classroom after the COVID-19 pandemic.

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  27. Open Schools: There are open schools offering flexible schooling to large numbers of pupils in various countries. Three examples are India (<https://www.nios.ac.in/>), Namibia (<https://www.namcol.edu.na/>), and New Zealand (<https://www.tekura.school.nz/>)
  28. Open Universities: Some 50 jurisdictions around the world have established open universities, which enrol millions of students between them. Three examples are Canada (<https://www.athabasca.ca/>), Tanzania(<https://www.out.ac.tz/>), and the United Kingdom (<http://www.open.ac.uk/>).
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