CHAPTER EIGHT

Effects of COVID-19 Outbreak on Students and Youths Meta-Cognitive Skills

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Abstract
With the emergence of coronavirus (COVID-19) disease and the integration of ubiquitous pandemic and lockdown, learning and teaching have changed the way we viewed the learning process. Indisputably, there are many ways of using technology to support students' and youths' learning which enables them to manage the pace, time and place of their learning despite the COVID-19 pandemic. Technology Enhanced Learning (TEL) can place students at the centre of the learning process. This means that students need to take more responsibility for their learning. However, this requires students to develop metacognitive strategies so that they can identify their own learning styles in the midst of COVID-19 lockdown. This paper examined the effects of COVID-19 outbreaks on students' metacognitive awareness on their learning outcomes within technology enhanced learning environments and found that the development of students' metacognitive skills has a direct bearing on learning performance.

Keywords: Coronavirus, Metacognition, Skills, Technology enhanced learning, Learning strategies.

Introduction
The outbreak of Coronavirus Disease (COVID-19) have brought a whole new dimension to almost every segment of economy and in particular to education. Learning and teaching in many disciplines now occur within technology enhancement. Information and Communication Technology (ICT) is used as a means for engaging in such activities as communication, socialisation, networking and researching are enhanced. Health as defined by the World Health Organisation (WHO) is a state of complete physical, mental, social and emotional well- being and not merely the absence of disease or infirmity. The

above definition sees or views health as a ''State'' It also emphasized the word ''complete'', which means to be a state of fullness, being perfect, entire and wholesome. Disease is defined as an abnormal condition of the body or mind that causes discomfort and dysfunction different from injury (WHO 2014). It is any abnormal or harmful condition that affects society, people's attitudes and their way of living. Coronavirus is an infectious disease caused by a newly discovered virus called corona. Most people infected with the coronavirus disease will experience mild to moderate respiratory illness and may recover without requiring special treatment.

Concept of Coronavirus (COVID-19) Pandemic

Coronavirus also known as COVID-19 is a pandemic which was first detected in Wuhan a central city of china in December 2019. The deadly virus has spread to more than 200 countries across the globe. More than 1.5million cases were considered to have been recovered so far. The confirmed cases related to it, more than one million persons have died from the complication of COVID-19 as at Wednesday, 27th May 2020 (NCDC 2020). The first index case of coronavirus in Nigeria was discovered in Lagos from an Italian man who returned from Italy on business trip and the first case was detected on 27th February, 2020. Nigeria Centre for Disease Control (NCDC) urged Nigerians to comply with rules that guide coronavirus which was announced by federal government like staying indoor, social distancing, regular washing of hands under a running water, use of alcohol based hand sanitizers, face mask, and to avoid frequent touching of eyes, nose and mouth with unclean hands in order to contain the disease and avoid spread of the virus. (NCDC, 2020)

Effects of Meta-Cognitive Skills on Learning Amid COVID-19 Pandemic.

The emergence of the internet and latest information and communication technology (ICT) have brought a whole new dimension to almost every aspect of life. Learning and teaching in many disciplines now occurs within technology enhanced environments. In the most technology enhanced learning environments, students have the freedom to navigate through a wide range of resources, represented as text, animation, audio and video, which are commonly presented in a nonlinear way (Cromley, 2015). Learning in Technology Enhancement Learning [TEL] environment required students to regulate their learning by marketing decisions about what and how to learn, how much time to spend on the subject and determining whether the topic has been understood or not (Flynn

2014) TEL provides model of learning and therefore make sure it works best for students who are motivated, self- directed, well organized and strategic.

Self-regulated learning is a form of metacognitive guided learning whereby students and youths set learning goals for themselves, monitor their progress, regulate and control their cognitive (Aze 2014). Boek (2015) further stressed that, self-regulation is the ability to develop knowledge, skills and attitudes that can be transferred from one learning environment to another as well as to a leisure and work environment. During COVID-19 lockdown/stay at home, student's achievement was influenced by the level and effectiveness of applied self-regulation techniques, or the ability to plan, monitor and evaluate their own behaviour and learning strategies.

Metacognition
The engine that drives self-regulated and self-directed learning is metacognitive. Sham (2016) suggested that students use metacognition to identify suitable learning strategies in the appropriate learning situations. The concept of Meta-Cognition is the 'knowledge and cognition about cognitive phenomena ''(Flave 2014). It includes students learning and awareness of their learning, how they control their strategy selection and change plans when needed. Phelps (2013) suggested that metacognitive awareness empower learners to become more independent in their approach of learning with and without computers in the future. Metacognitive skills of students and youths may provide distinct advantages in the context of rapid change, such as coronavirus pandemic outbreak where knowledge in using a particular piece of software to update one's knowledge in a short period of time was imperative. Students and youths with strong metacognitive skills could foresee problems that may arise during a learning experience, and they are able to better allocate their cognitive resources for learning. In addition, they are able to monitor their learning experiences and determine the information they understand or information they need to investigate more (Walcut 2015). Victor (2015) also suggested that in order to facilitate student's overall retention and use of knowledge, a major goal of education, metacognitive skills must be to assist students and youths in monitoring their learning. Metacognitive has proven to be a particularly useful strategy for such settings that involve awareness and regulation of cognitive processes. Promoting the development of metacognitive skills, encourages students to anticipate, monitor and reflect upon their own cognition and can lead to better engagement with learning materials.

Effects of COVID-19 Outbreak on Metacognition of Students.

Coronavirus pandemic is an infectious disease caused by a newly discovered virus (WHO). It is a sudden outbreak of disease caused by a virus that can easily spread from person to person and yet to find curable drug or vaccine. On the other hand, it could be defined as an incurable disease in the present situation. In view of the foregoing, the researcher is of the opinion that the absence of vaccine as means to contain the spread and continuity of the pandemic will bring economic setback and pose a particular problem to live. If coronavirus vaccines are yet to be discovered, it is impossible or difficult for the medical experts to diagnose and know how to treat such disease. It is obvious and pity that many as a result of this COVID-19 economy and life of the affected countries will be much destabilized particularly Nigeria. For instant areas so affected include education (all levels of institution of learning shutdown), market, movement of people and goods from one place to another, Nigeria borders are closed and social activities within Nigeria are paralysed. Worship and entertainment centres were affected. WHO (2020) found that COVID-19 was a widely spread virus which infection could affect hundreds and thousands of people within a short time and therefore distract attention of government attends much to other national issues, and medical personnel from the rest segments of health and other sectors of health-care. Nigeria Centre for Disease Control (NCDC) in collaboration with Medical Association of Nigeria (MAN) and scientists from most universities have reported extensive research work carried out but yet, no curable vaccine had been discovered.

Effects of COVID-19 on Students' and Youths Education

Academic accomplishment is usually established through examinations (theory or practical) which consist of a set of questions, tasks that seek to determine how much an individual or group perceived the subject as a result of learning. Student factors are the circumstances in school or learning environment that are at the students' disposal and have an effect or their performances in vocational/technical subjects especially practical skills. The emergency of covid-19 does not only affect people's health but equally destroy and setback the nation's economy. Education which is the bedrock of a nation's economy growth was bastardised during the lockdown. Several researchers have predicted that the COVID-19 pandemic will not help in particular but may likely has negative effect on student cognitive achievement more (Victor, 2020). Functional education has brought about reduction in poverty and has contributed to national development. Education equips participants with skills that enhance income generation

and improve self-reliance and help participants to contribute meaningfully to the growth of the society. Studies have shown that there is a connection between meta cognitive skills acquisition and ultimately an increase in re-skilling and up-skilling of the youth's knowledge that will propel their own economic development and national development. (Sham,2016).

Societal Participation
Education plays an important role in national development. Informal education school programmes, in particular, are central in providing learning opportunities, new skills and knowledge for students and youths outside the reach of school environment. (Omeiza 2018). According to the UNESCO (2015), e-learning education helps to ensure equal access to education, enhance literacy among youths and improve students' access to vocational/technical training, science, technology and continued education. It also encourages the development of technical education and training, allocates resources for and monitors the skills acquisition as one of educational goals and promotes students and youth's life-long education and training. Metacognitive skills denote a process of education and training through which human and material resources available are enable to acquire skills for optimal performance and subsequent improved productivity. As a process such recurrent form of education and training could be at the instance of governments, parents, employers of labour, private organizations or still at the discretion of individuals who perceive the need for further training in order to be relevant in the society. Ramson (2015) opined that the control and direction of education, because of the perceived function in preparing youths for their future roles in employment and society, becomes a central concern for the corporatist state. To achieve these objectives, the governments and other stakeholders should encourage the participation of students and youths through provision of conducive environment and requisite training materials.

Conclusion
Education is imperative and a necessity for man in order to articulate himself/herself and achieve fullness. But the system which is elitist and instalment, cannot alone help man to attain all the education that he needs for the achievement of self-fulfilment and national development. The terminologies, such as vocational education, technical education, and recurrent education have been used by different bodies to stress that education which should be co-terminus with life. To cater for the educational aspirations of all citizens especially students and youth's metacognitive skills play a very important role. In fact,

COVID-19 PANDEMIC: THE PENDULUM FOR RECONSTRUCTION OF INSTRUCTIONAL SYSTEM IN NIGERIA

Nigeria has made modest but significant progress in the development of students and youths' education. A country that pays and concentrates its educational investment on youths and students is unwilling by failing to develop and utilize its human resources optimally considering that knowledge and skills have become means for national development, the outbreak of the COVID-19 in Nigeria in spite of the lockdown and effect on the resources has necessitate to continue to educate and equip students and youths to contribute more effectively to social, economic, political and cultural development.

Suggestions

Based on the discussion, the following suggestions are made:
1. Federal Government should encourage the meta-cognitive education programme by providing necessary materials and equipment for effective learning.
2. Federal Government should establish and equip the existing centres education teaches life-long planning educational skills.
3. Technical and vocational guidance counsellors should be sort for and encourage bearing in mind the decision for life work can take place at various ages and levels in an individual.
4. Parents, Guidance and other individual should encourage their wards to key into the e-learning and e-teaching programme set up by the government.

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