



The impact of the quality of education was caused by the changes from face-to-face to Remote Learning as a result of the Covid-19 pandemic

Zamokuhle Mbandlwa, Ph.D. candidate and a Researcher in the Department of Public Administration, Durban University of Technology

Abstract- The COVID-19 pandemic has impacted education systems globally, contributing to the near-total closing of schools, universities, and colleges. Teachers are at a very high risk of getting COVID-19, and many policymakers have agreed to briefly close educational institutions to minimize the spread of COVID-19. Approximately 825 million learners are currently impacted by school closures in response to the pandemic. Most countries have implemented lockdown regulations to control the movement of people to curb the spread of the virus. The lockdown regulations affected the schools, universities, and colleges very badly. The modes of teaching and learning had to be changed so that the teaching and learning will continue while fighting the spread of the virus. Academic institutions had to change the assessment methods to meet up with the teaching methods. The quality of education and assessment methods were affected during the lockdown implementations as a cause of the Covid-19 pandemic. The objective of this paper is to articulate the outcomes of the quality of education on the new modes of teaching and learning. The pandemic has forced most academic institutions to change from face to face mode of teaching and learning to online learning. The lack of student contact with the teacher has often caused students to feel less enthusiastic about the integrity of their studies. This leaves students to turn to half-full homework, to get answers from their peers, or to turn to none at all simply because knowledge has become less necessary due to COVID-19. This study, therefore, presents a view that the changes in the education mode are of inferior quality compared to the face to face learning. This study applied a secondary research methodology because the data that was used to draw findings was available online, government gazettes, conference findings, and newspaper articles.

Keywords: E-learning, pandemic, virus, Covid-19, teaching and learning.

I. INTRODUCTION

South African universities have been forced to switch from face-to-face to online learning (e-learning) as a result of the coronavirus pandemic (COVID-19). However, a variety of obstacles discourage marginalized students from understanding the full value of e-learning. The key purpose of this research is therefore to suggest possible approaches to address these obstacles for students, so that they can have access to successful e-learning. From the beginning of higher education, from the time of colonization to the time of decolonization, almost all South African universities have relied on face-to-face instruction (Ali, 2020: 17). Face-to-face instruction is assumed to be conventional and lacks student experience, since it happens in the presence of an instructor who deposits information for students in a demarcated classroom, using traditional approaches (lecture-centered) and traditional materials such as textbooks, talks, chalkboards and others. However, these demarcated physical classrooms are not available in the event of problems ranging from student demonstrations to outbreaks of pandemics. Face-to-face learning offers real-time contact with resources and others, takes place during a defined time of contact, and provides students with timely

feedback. That said, e-learning is an education that takes place over the Internet that is alternatively called online learning, which is an umbrella term for all learning that takes place over distance and not on a face-to-face basis. Also, the concept of e-learning is changing from Web 0 to Web 4.0. Thus, 'web 0 Internet-based learning was launched, which was a read-only platform. Network (2.0) and Web (3.0) also facilitated real-time connectivity and connected knowledge, respectively (Mpungose, 2020: 04).

We are now seeing Platform 4.0, where the computer and the human brain can communicate directly. The principles of e-learning, distance learning, online learning, and web-based curriculum have been included in the literature. However, these principles share the similar characteristic that "they are a form of instruction that occurs between the learner and the instructor and are held at different times and/or locations, using several forms of material." As such, e-learning as the use of educational technology allows online access to learning and instructional resources (Evans, Bay, Wilson, Smith, Lachman and Pawlina, 2020: 12). The value of e-learning, which takes place by the use of the Internet in 21st-century university education, is undeniable, particularly for today's students as digital natives. E-learning is capable of rendering information accessible digitally through the extensive use of digital technology such as computing tools (computers, tablets, cell phones, etc.) and technological resources (learning management system, software applications, social media sites, and others). This means that students have the right to access course information/content at any time and anywhere, regardless of obstacles such as the occurrence of a pandemic, given they have access to hardware and apps (Lassoued, Alhendawi and Bashitialshaaer, 2020: 232).

II. THEORETICAL FRAMEWORK

Face-to-face learning is irreplaceable and is the foundation of any learning institution, even though the modern debate and technological revolution require the use of e-learning. The latter studies believe that there is still confusion between face-to-face (person-to-person contact on a live synchronous platform) and e-learning (self-paced learning in an asynchronous platform). As a solution to this conundrum, hybrid learning that blends online and face-to-face learning is the path forward, meaning that students can choose a range of ways to navigate course material depending on their preferences (strengths/limitations). There are persuasive conditions for students to opt online through face-to-face learning; these could include aggressive student protests, pandemic diseases such as COVID-19 in the sense of this report, and others. According to the World Health Organization-WHO (2020), COVID-19 is a new strain of viruses found in 2019 that cause diseases ranging from common colds to more serious diseases that can lead to death (Aliyyah, Rachmadtullah, Samsudin, Syaodih, Nurtanto and Tambunan, 2020: 92). They are transmitted by animals and humans. Popular signs of infection include respiratory symptoms, fever, cough, and shortness of breath. On 11 March 2020, the WHO (2020) announced a pandemic of COVID-19, and everyone was urged to avoid direct contact with someone with symptoms. Universities across the world, however, need to shut down. In the sense of South Africa, the President called for all universities to close down and find ways to give lectures online as a precautionary measure from 18 March 2020. This call raised concerns about the viability of e-learning, especially at the School of Education in one of the universities in the province of KwaZulu-Natal, due to the degree of inequality in the background of South Africa. Much has been achieved in higher education to correct historical inequality by education (Adedoyin and Soykan, 2020: 06).

Christian, Purwanto and Wibowo (2020: 2799), the difference between those who have and do not have access to computers and the Internet seems to be a big factor restricting the viability of e-learning in the sense of South Africa. The study further argues that topics such as socio-economic conditions, ethnicity, social status, gender, age, geographical region, and educational background decide the extent of the digital divide in the university context. Though Internet and computer connectivity is strong in developed European and American universities, African universities, especially in the South African context, are still struggling because of the strength of the factors that contributed to the digital divide. Data indicates that different services and strategies have been created and enforced to overcome this challenge; thus, universities provide students with free laptops and Wi-Fi (a wireless network that usually enables electronic devices to communicate with the Internet) connectivity inside universities and residences. However, little or no study has been undertaken in the sense of South Africa to resolve the problems of university students (the digital divide) that keep them from accessing e-learning from home. This study argues that e-learning, when students are at home, will

never be realized in the sense of South African universities unless the digital divide is tackled (Murphy, 2020: 493).

Learning theory is intended to clarify and help one understand how people learn; however, literature is complex and detailed enough to span whole parts of the library. It encompasses a broad variety of fields, including psychology, sociology, neuroscience and, of course, education. Three of the most common learning philosophies of behaviorism, cognitivism, and social constructivism will be highlighted to form the basis for further debate. There are also a variety of other learning theories that are applicable to online education. Before reviewing these hypotheses, it would be useful getting a short discussion of the word hypothesis itself. Theory is characterized as a collection of arguments, principles or ideas relating to a particular topic. A theory commonly describes, discusses and/or forecasts phenomena. The concept of theory often varies depending on the discipline, particularly when it comes to the term model. Both words are used interchangeably and usually refer to the same definition. However, a model is most often a graphic image of fact or an idea. The phrases theory and model will be used interchangeably in this discussion. Theories and Models for Online Education: Look for an Applied Model, the theory or model is structured to offer answers to fundamental questions relating to a phenomenon (Mhlanga and Molo, 2020: 180).

Behavioralism theory depends on how people act. It has grown from a positivist worldview of cause and effect. Action causes a reaction in basic terms. In school, behaviorism explores the behaviour of students while studying. More precisely, behaviorism focuses on studying how students react to such conditions that, when replicated, can be analyzed, quantified, and ultimately controlled for each person. The emphasis in behaviorism is on what is measurable, not on the mind or neural mechanisms. In general, if you cannot observe it, it cannot be observed. Behaviorism contributed to the creation of learning taxonomies because it stressed the analysis and assessment of various phases in the learning process. Behaviorists have repeatedly examined learning practices to deconstruct and describe learning components. Among the early psychologists, the goal was to create a taxonomy of learning that applied to the growth of academic skills and to emphasize the importance of problem solving as a higher level of ability. Cognitive domains remain a fundamental text and an important reading within the educational culture (Onyema, Eucheria, Obafemi, Sen, Atonye, Sharma and Alsayed, 2020: 110).

III. RESEARCH METHODS

The analysis methodology is the basic methods or strategies used to classify, pick, process and interpret information on the subject. In a research paper, the Analysis section helps the reader to objectively determine the general feasibility and reliability of the report. Research methods may be understood as a way to approach or address the research issue systemically. Essentially, thus, it should be interpreted as a method of learning how science is performed in a scientific manner. In this approach, we study the different steps that are usually taken by a researcher in the study of his/her research dilemma and the underlying reasoning behind it (Walliman, 2017: 03). The selection of the analysis approach is key to what conclusions you may draw about a phenomenon. It limits what you can tell about the cause and the causes that drive the phenomena. Analysis methods refer to the instruments that one uses to carry out research. They can be either qualitative or quantitative or mixed. Quantitative approaches review analytical data and also involve the use of mathematical instruments to interpret the data gathered. This allows the calculation of variables and the relationship between them to be defined. You may use graphs and tables to display this type of data. Qualitative data is non-numeric and focuses on patterns (Punch and Oancea, 2014: 05).

Mixed approaches are made up of both qualitative and quantitative analysis methods. Mixed approaches make it easier to understand unpredictable findings. Any research tool, whether conventional or new, falls into one of two categories: primary or secondary research. Primary research is knowledge obtained by self-directed research techniques, whereas secondary research is information gathered from previously performed studies. Secondary research is typically the location where most research starts. This is because secondary research will provide a researcher with the awareness that other researchers have already gathered the necessary information in the past. Primary analysis covers the holes in knowledge that the researcher has not been able to obtain by secondary research techniques. The purpose of primary research is to address basic questions specifically relevant to the project at hand (Christensen, Johnson, Turner and

Christensen, 2011: 03). This method of study is incredibly useful, however, because of its existence, it requires more time to compile than secondary research. This study applied secondary research methodology, existing knowledge was used to reach conclusions. Journal articles, research conferences and proceedings, newspaper articles, government gazettes and various organizations were used to address the objectives and the problem that is addressed by this study.

IV. RESULTS AND FINDINGS

The epidemic is exacerbating pre-existing education inequalities by developing the prospects for many of the most disadvantaged girls, adolescents, and adults those residing in poor or rural communities, children, migrants, people with disabilities and internally displaced persons to continue their schooling. Learning losses also threaten to extend beyond this generation and erase decades of progress, not least in support of girls and young women's educational access and retention. Some 23.8 million additional children and youth (from pre-primary to tertiary) may drop out or not have access to school next year due to the pandemic's economic impact alone. Similarly, the disruption of education has occurred, and they will continue to have substantial effects over and above education (Muchanga, 2020: 05). Closures of education Institutions obstruct the availability of vital services to children and communities; including access to quality food, the willingness of many parents to work, and to increase chance of abuse against women and children. The tragedy of COVID-19 and the unprecedented destruction of education are far from over. Like several, The date is yet to be announced by 100 countries for the re-opening of schools and the entire world, Governments, unions, parents and children Grappling over when and how to approach The next step. Countries have stopped preparing Reopening schools nationally, either on the basis of Grade and prioritization of test grades, or Localized vacancies in countries with less The virus's events. However, given the continuation of Virus virulence, the bulk of countries (Rohwerder, 2020: 12).

In the 21st century, at the end of 2019 in Wuhan, China's high-tech industry hubs experienced an outbreak of a fully distinctive coronavirus that killed a few thousand Chinese in the fifty days of propagation, with thousands of other people suffering. The novel virus has been nominated as COVID-19 novel coronavirus by Chinese scientists. Later, in a shorter time, this COVID-2019 has exploded all over the globe. Several countries' economies are seriously impacted by COVID-2019. In addition, the epidemic altered operational conditions across the globe within a month. The effects of the pandemic are unstoppable and uncontrollable for many sectors across the planet. Later, nearly 120 countries have abandoned face-to-face learning; with COVID-19, roughly one billion students are taught worldwide. Much of the higher education sector functions through e-learning. In the meantime, almost all of the country, including Malaysia's higher education ministry, has issued an order to shut public school and higher education as an emergency measure to avoid the spread of the virus in response to the COVID-19 pandemic (DARMODY, SMYTH and RUSSELL, 2020: 09).

Technologies have shifted the old method of learning to the current way of learning, including artificial intelligence. E-learning is also protected by a wider definition in technology-based learning through blogs, learning portals, video conferencing, Twitter, smartphone applications, and thousands of free resources with mixed learning platforms. E-learning is currently expanding students' awareness, including university personnel and technical and business expertise, via the Internet. Most higher education universities offer online classes to their students on and off campuses. In Malaysia, the Government is offering a range of tools for higher education. The growth of the online education industry is estimated to be 16.4% per year over the 2016–23 projected period. With the massive growth of the internet, university teaching and learning models could evolve over the next 10 to 15 years (Bozkurt, Jung, Xiao, Vladimirschi, Schuwer, Egorov, Lambert, Al-Freih, Pete and Olcott Jr, 2020: 08). Thus, it was focused on the use of the e-learning platform for male and female students. This research focuses on contrasts between male and female peers on the usage of e-learning portals by university students during the period COVID-2019. Globally, owing to the failure of the COVID-19 epidemic of colleges, most teachers and students are pleased with the transition to online education. Faculty representatives at world-renowned colleges have started to gain online teacher credentials to offer online instruction to their students. Around the same time, faculty and staff learn how to use multimedia learning tools. Previously, they only use distribution through face-to-face instruction. However, the move to online mode has raised a host of concerns about the consistency of education. Moreover, the standard of education and the excellent facilities, such as computers and new IT

machinery, are now in high demand, and universities are changing their teaching models through the use of intellectual resources. As a result of an abrupt change from face-to-face instruction to online learning, there are few problems encountered by students and lecturers. Moreover, most of the countries have big technical connectivity problems in rural areas; thus, the quality of online education may be a key concern that needs to be worked on (Tanyu, Spier, Pulizzi, Rooney, Sorenson and Fernandez, 2020: 10).

V. CONCLUSION

In conclusion, The spread of COVID-19 affected life across the globe in 2020. As in every other field, the pandemic of COVID-19 has impacted education in several respects. Government efforts have promoted a shared aim of reducing the transmission of coronavirus by adopting steps to restrict social interaction. Many nations have suspended face-to-face training and tests, as well as limits on immigration affecting pupils. Standard classrooms are supplemented, if possible, by books and supplies taken from education. Various e-learning systems allow contact between teachers and students and, in some cases, national television programs or social media platforms are used for educational purposes. E-learning has undergone major transition due to the rapid development of internet and information technologies. New e-learning tools are being developed for tutors to promote appraisal and for learners to take part in lectures. Both assessment systems and self-assessment have been found to benefit from technical innovation. Also courses that only offer online content such as Large Open Online Courses (MOOCs) have become popular. The use of e-learning resources in higher education ensures that more knowledge can be analyzed and the quality of teaching increased. All of this has affected the quality of education and type of students that are produced by the education system.

REFERENCES

1. Adedoyin, O. B. and Soykan, E. 2020. Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*: 1-13.
2. Ali, W. 2020. Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *Higher Education Studies*, 10 (3): 16-25.
3. Aliyyah, R. R., Rachmadtullah, R., Samsudin, A., Syaodih, E., Nurtanto, M. and Tambunan, A. R. S. 2020. The perceptions of primary school teachers of online learning during the COVID-19 pandemic period: A case study in Indonesia. *Journal of Ethnic and Cultural Studies*, 7 (2): 90-109.
4. Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G., Lambert, S., Al-Freih, M., Pete, J. and Olcott Jr, D. 2020. A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*, 15 (1): 1-126.
5. Christensen, L. B., Johnson, B., Turner, L. A. and Christensen, L. B. 2011. Research methods, design, and analysis.
6. Christian, M., Purwanto, E. and Wibowo, S. 2020. Technostress creators on teaching performance of private universities in Jakarta during Covid-19 pandemic. *Technology Reports of Kansai University*, 62 (6): 2799-2809.
7. DARMODY, M., SMYTH, E. and RUSSELL, H. 2020. The implications of the COVID-19 pandemic for policy in relation to children and young people. *ESRI Survey and Statistical Report Series*, 94
8. Evans, D. J., Bay, B. H., Wilson, T. D., Smith, C. F., Lachman, N. and Pawlina, W. 2020. *Going virtual to support anatomy education: A STOPGAP in the midst of the Covid-19 pandemic*: Wiley Online Library.
9. Lassoued, Z., Alhendawi, M. and Bashitialshaer, R. 2020. An exploratory study of the obstacles for achieving quality in distance learning during the COVID-19 pandemic. *Education Sciences*, 10 (9): 232.

10. Mhlanga, D. and Moloji, T. 2020. COVID-19 and the Digital Transformation of Education: What Are We Learning on 4IR in South Africa? *Education Sciences*, 10 (7): 180.
11. Mpungose, C. B. 2020. Emergent transition from face-to-face to online learning in a South African University in the context of the Coronavirus pandemic. *Humanities and Social Sciences Communications*, 7 (1): 1-9.
12. Muchanga, M. 2020. Exploring Educational Lives of the Excluded Youth under COVID-19 in the SADC region.
13. Murphy, M. P. 2020. COVID-19 and emergency eLearning: Consequences of the securitization of higher education for post-pandemic pedagogy. *Contemporary Security Policy*, 41 (3): 492-505.
14. Onyema, E. M., Eucheria, N. C., Obafemi, F. A., Sen, S., Atonye, F. G., Sharma, A. and Alsayed, A. O. 2020. Impact of Coronavirus pandemic on education. *Journal of Education and Practice*, 11 (13): 108-121.
15. Punch, K. F. and Oancea, A. 2014. Introduction to research methods in education.
16. Rohwerder, B. 2020. Social impacts and responses related to COVID-19 in low-and middle-income countries.
17. Tanyu, M., Spier, E., Pulizzi, S., Rooney, M., Sorenson, I. and Fernandez, J. 2020. Improving education outcomes for students who have experienced trauma and/or adversity.
18. Walliman, N. 2017. *Research methods: The basics*. Routledge.