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Research Article

The 'blemishes' of COVID-19 at South Africa's higher education institutions

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This qualitative study presents the blemishes of COVID-19 at Higher Education institutions. The aim of the study was to see if online learning and teaching are continuing in Higher Education institutions post-COVID-19. A sample of twenty participants comprising ten students and ten lecturers were purposively selected to take part in the study. Data was collected using an e-questionnaire which was emailed to the participants. The findings of the study revealed that students are keen on continuing with online learning because of the flexibility that it has. On the other hand, lecturers remain stuck in the old ways of teaching because of the non-compatibility of gadgets and the persisting load shedding that grapples the country. The study recommends that the lecturers need to be provided with tools to teach online to remain to be in line with the world's move towards the integration of technology. The issue of load shedding needs to be addressed in the country needs to realise the benefits of the fourth industrial revolution.

Keywords: COVID-19, online teaching and learning, technology integration, instructional practices

1. Introduction

South Africa was not spared from the ordeal that COVID-19 brought to its education system. This led to all the sectors of teaching and learning in many countries closing because of controlled movements which were to reduce human contact to minimise the spreading of the virus (World Bank, 2020). In fact, the United Nations report on "Education during COVID-19 and Beyond" stated that the closure of schools and other learning areas affected 94% of the world's student population and 99% in low- and low- to middle-income countries. With South Africa still battling the scourge of electricity shortage, it was impossible for any mode of teaching and learning except the face-to-face one to be introduced successfully. When school buildings around the world were closed with the purpose of protecting the health of children and educators, many educators quickly turned to technology-oriented distance education (Sokal et al., 2020). However, in some Higher Education Institutions (HEIs), online learning, and teaching were introduced even though many said it was like putting a cart before the horse (Vandeyar, 2015) because many lecturers were not used to teaching and engaging with technology like the way their students are (Sokal et al., 2020). This is so because South Africa put an initiative where learners and students at some schools and HEIs received gadgets in the form of laptops and tablets before the educators were checked on how well they (educators) can teach with them. This then created a huge challenge because many educators have gone through university teacher training programmes where the traditional method of teaching was used in training them. In another case in Turkey, teachers and students were forced to an emergent transition from traditional classes to online classes without adequate time for preparation (Sarı & Keser, 2021). Being that it may, the South African academic calendar continued, and to some extent, some educators became comfortable with using Information and Communications Technologies (ICTs) in classes. The HEIs too found themselves wanting because the integration of ICT and the constant use of institutions' Learning Management Systems (LMS) was the only mode of instruction that was used for teaching and communication. This happened for two and half years before the COVID-19 infection rates started to be controlled resulting in

face-to-face classes resuming. It is against this premise that this qualitative study explores the '*scars*' that COVID-19 has had on HEIs in Gauteng province, South Africa.

Now that COVID-19 infections have sincerely declined in South Africa, face-to-face learning has resumed not only in South Africa but also in many parts of the world. This has surely disrupted what the COVID-19 practice brought to these sectors where online learning was introduced. This study then aimed at counting the costs that COVID-19 has had on HEIs. According to Gülmez and Ordu (2022), a great impact of the pandemic on education is its potential disruption of all the components in the learning process, which many manage to manoeuvre through. The pandemic affected students' readiness and involvement, support of lecturers, classroom equipment, safety and inclusiveness of schools, and system management (World Bank, 2020). This saw the forced pedagogical shift that the lecturers and students had to go through. With the *new normal* having reverted to the *usual normal*, the question was to investigate the *blemishes* that COVID-19 had on the teaching and learning activities at HEIs in some parts of South Africa. With the HEIs having tried the online system which saw them teach, assess, and even run final examinations using the invigilator App, the question is, how has it been to date now that the pandemic is over?

1.1. Theorising the COVID-19 Challenges to HEI

The outbreak of COVID-19 made many students face various social, economic, and cultural factors, which acted as barriers to their personal and academic lives, and the situation was more challenging for minority and underprivileged students (Albalushi et al., 2022). Interestingly, a study showed that COVID-19 had a negative effect on medical students from high-income, middle-income, and low-income countries (Sharma & Bhaskar, 2020). This though does not rule out other students and other individuals who are engaged in teaching and learning situations, lecturers included. To address the challenges posed by COVID-19, the entire education sector saw a pedagogical shift in adopting online teaching (Siddiquei & Kathpal, 2021). During the outbreak of COVID-19, instructional practices were through online methods. Various new methods of online instruction were introduced to support the online learning environment. Some institutions fully made use of their respective LMS which range from Ulwazi, Moodle, Blackboard, Brightspace, etc. and this facilitated online education even though many lecturers had to learn the system while learning is continuing. Online education could be delivered in the form of asynchronous distance education, where podcasts and recorded videos were used, or synchronous distance education, where virtual classrooms or live video conferences were used (Siddiquei & Kathpal, 2021). These types of education are all possible in the aforesaid LMS that various HEIs are using in the country. The online teaching was met with mixed reactions by many, students included. This is because the demand for it came with a lot of data and connectivity that one needed, even under serious challenges of load shedding in the country. Faculties like Humanities where they offer teacher training programmes had to resort to online methods to evaluate pre-service teachers during their school-based learning (teaching practice). This brought in a new dimension to lecturers because that was when it was realised that indeed the students in UoTs are Generation Y who enjoy working with technologies. While some were comfortable with MS Teams for classroom observations, others resorted to submitting YouTube links with their teaching recordings. These then put a lot of demands on lecturers to adapt and come to the level of digital-aged students.

In another study, it was reported that around 85% of the students were satisfied with online learning despite the challenges that they had with connectivity and data (Kakeshita, 2021). The sudden change from face-to-face to online teaching also placed an additional burden on lecturers in the HEIs to teach while measuring students' achievement at regular intervals. According to Kokoç and Zainuddin (2020), the challenges of COVID-19 were experienced in many countries since it was a global catastrophe. In Germany, it was found that many teachers experienced a lot of stress and their coping strategies during COVID-19-induced distance teaching (Kokoç & Zainuddin, 2020). This caused most of the teachers to spend at least four hours a day on remote teaching. This shows that the outbreak of COVID-19 had dire consequences for German teachers.

Being that it may, in Turkey, the pandemic had negative psychological effects on all stakeholders of higher education (HE), and distance education implementations suffered from infrastructural and psychological issues (Karademir et al., 2020).

One of the main objectives of any assessment is for the students to attain a specified standard before being labeled as 'competent' (Siddiquei & Kathpal, 2021). Online assessment results may benefit both students and teachers. It has been found that there was higher student achievement and promising staff perception, with improved technological skills, while implementing e-learning and online assessment during COVID-19 (Elzainy et al, 2020). According to published studies, the integrity of assessment is a vital and challenging issue, especially as testing becomes more commonly distant from the usual classroom setting (Siddiquei & Kathpal, 2021). Being that it may, programmes in HEIs have been written and accredited long before the outbreak of COVID-19. This means that many HEIs programmes have been accredited as face-to-face programmes which resulted in the order changing back to face-to-face. This surely has had an impact on lecturers and students hence this study. Now that learning and teaching have returned to face-to-face teaching, how do HEIs lecturers take their practices developed from online teaching to prioritize and optimize what face-to-face pedagogies afford in relation to the updated understanding of educational ideals, methods, and values as lecturers? What are the HEI lecturers' lessons from the COVID-19 practices that can best be used in face-to-face classrooms? What lessons have the HEI lecturers and students learned in online teaching? The above questions are necessary because others see online teaching as having advantages while others do not see it that way as discussed in the following section.

1.1.1. Advantages of online teaching

There are quite a few advantages that online teaching has particularly in Higher Education Learning. I have seen these as important to this study to gauge how they benefited the HEIs during the times of nationwide lockdown. According to Smedley (2010), online teaching provides the institutions as well as their students the flexibility of time and place of delivery or receipt of learning information. Online learning, as some call it e-learning, enhances the efficacy of knowledge and qualifications via ease of access to a huge amount of information. This is so because using e-learning, the facilitator can post any amount of work including videos, which happen to be huge in terms of size, all at once for students to access them. E-learning also provides opportunities for relations between students using discussion forums. On the other hand, e-learning happens to have its disadvantages as well.

1.1.2. Disadvantages of online teaching

The disadvantages of e-learning or online teaching are often caused by a variety of issues particularly South Africa being a country of different socioeconomic status. As highlighted by some researchers, the main disadvantage of e-learning is the absence of vital personal interactions, not only between learners and instructors but also among colleague learners (Burdman, 1998; Young, 1997). This can be because adopting e-learning from a traditional form of learning and teaching could have different attitudes between the student and the facilitator. Arkorful and Abaidoo (2014) say that e-learning often robs students of better clarifications and further explanations of abstract concepts, which could be detrimental to the output expected. They further add that issues of plagiarism and cheating might not be easily detected in some instances. This is because it might not be feasible to plagiarism by scanning all the submitted tasks in large classes. Being that it may the intention of this paper was to get the HEIs' students and lecturers' perceptions on face-to-face teaching post-COVID-19 in Gauteng province.

2. Method

2.1. Research Design

This proposed study used a qualitative research approach because of the nature of the problem at hand. Qualitative research means exploring and understanding the meaning that individuals or

groups ascribe to a social or human problem (Creswell, 2012). The said human problem, in this case, would be the *blemishes* that COVID-19 has created in both the lecturers and the students in the selected HEIs in Gauteng province. Even though a qualitative approach is a manner of asking questions from the participants, using an open-ended e-questionnaire had the same effect as face-to-face interviews. The proposed study used a case study research design. Creswell (2012) defines a case study as a design and inquiry found in many fields especially evaluation in which the researcher develops an in-depth analysis of a case. This is often a programme, event, activity, process, or one or more individuals. The study focused on two HEIs in the Gauteng province. These HEIs were of the same characteristics because they were affected by the lockdown which came into effect because of the outbreak of COVID-19.

2.2. Research Paradigm

An interpretive paradigm was followed because the study aimed at finding out, from the lecturers and students who were or are currently affected by COVID-19, their current experiences in the teaching and learning situation in the post-COVID-19. The ontological view that the study adopted was that of 'relativist' because relativists believe that all truth is "constructed" by humans and situated within a historical moment and social context. The validity of the instruments was established using a technique known as respondent validation. The data collected was presented back to the participants to see if they agree with the results. therefore, the testing and comparing of data also provided the reliability of the data.

2.3. Participants

The participants, who were lecturers and students at the University of Technology, were judgmentally selected on the basis that they used the online platforms during the country's lockdown at selected HEIs, and they are also back to face-to-face teaching and learning mode. Therefore, purposive and convenience sampling were adopted in this study because this provided greater depth for the study, which was greatly needed. Khoza (2013) defines convenience sampling, also called accidental or opportunity sampling, as the type, which comprises selecting the nearest individuals to serve as participants and abiding by that method up until the required data is obtained. Merriam (2018) says that sampling is a process, the act, or technique of selecting a suitable sample, specifically a process of selecting a population for the purpose of determining the parameters or characteristics of the whole population. A total of 20 participants were purposively and conveniently selected to take part in the study. There were ten lecturers and ten students that took part in the study. All the students were male and on the lecturers' side, there was a combination of genders. Pseudonyms were used where participants were referred to as L1 for lecturer 1 and S1 for student 1. The e-questionnaires were uploaded on the HEIs LMS with the help of the LMS champion of that HEI.

2.4. Instruments

The study used a qualitative approach where the use of open-ended e-questionnaires was sent to both the lecturers and students of the selected HEI in Gauteng province. The reason for choosing the use of the open-ended e-questionnaire was to see how much the participants have gotten used to technology. The e-questionnaires had one section, A which had five open-ended items (questions). Section B had questions that needed responses on face-to-face experience post-COVID-19.

2.5. Data Analysis

Data analysis is the process of systematically searching and arranging interviews, transcript, field notes, and other materials that have been accumulated to enable the researcher to reach conclusions and describe findings (Leedy & Ormrod, 2010). This study adopted thematic data analysis for both instruments. Maguire and Delahunt (2017) define thematic data analysis as the

process of identifying patterns or themes within qualitative data immediately after the completion of data collection and transcription.

3. Findings

3.1. E-questionnaire Responses

E-questionnaires had five open-ended questions, which produced two themes on students' responses and three themes on lecturers' responses. The students' themes were the *Lack of online learning post the COVID-19* and *lack of learning flexibility post-COVID-19.* The lecturers' themes were: *Maximum deeper elaborations when teaching post-COVID-19, unstable gadgets to keep up with online teaching, problems with load shedding, and reduced physical attendance during face-to-face classes.*

3.2. Students' Themes

Students' themes emerged when asked about their overall experiences with online learning after the pandemic and following the theme, are how they have responded.

3.2.1. Lack of online learning post the COVID-19

Most of the students lamented the lack of training and poor technological integration at the HEI during lessons. The responses that they wrote were: S1:

> I do not remember attending an online class ever since I came back from the 2020-2021 lockdown. I am now in my third year doing a Bachelor of Education Technical degree. We are only getting messages on the institution LMS Teams on when to attend classes/ when to submit tasks etc and not online learning in the form of lessons like we did during the pandemic.

In another response, S3 stated that, "Currently, some lecturers use the LMS for communication and assignment uploading which seems like the university does not prioritize online learning at all". On the other hand, his counterpart S4 wrote:

> If submitting an assignment online means online learning, then that is how far we go here. It was like this during the lockdown period and most activities were posted on the university LMS for us to just reproduce because learning was not engaging then. We also get SMSES on our phones when there is an announcement on the students' portal, but I do not remember getting an online interactive activity or a lesson on that portal, let alone training for that matter.

To add to that, S5 said that, "We often wait for the lecturer to present a lesson face-to-face and there is no sign that we will ever get an online class. I realised that all my lecturers are not keen on going back to online classes".

Another S6 asserted that:

> During the outbreak of the pandemic things were hard and the university spent a lot of money (I guess) to ensure that learning continues. We started knowing more about LMS and that made us keep checking the activities in the system. That was kind of fun and learning was responsive because I like having my gadget with me which made me learn anytime and anywhere, but things went back to the former normal where we must attend physically, and we seem to be missing the focus where the world is headed.

3.2.2. Lack of learning flexibility post-COVID-19

In responding to the above theme, S1 stated that "I feel like I am in chains now because learning should always wait for the lecturer or tutor to come to stand in front me, learning is no longer as interactive as before".

On the other hand, S3 wrote:

> I feel like being on campus was supposed to be easy to learn than being at home because of the availability of Wi-Fi but still, the Wi-Fi is less utilised because we hardly use it, and this makes learning boring because we wait for the actual face-to-face teaching to happen.

S7 wrote:

> Learning from home was suitable for online learning because I used my cell phone to be in touch with the class, but now that I am back on campus, learning has gone back to being too obvious where we wait for someone to come to teach us, that make my life to be restricted.

S8 added:

> Face-to-face learning does not make one be innovative because it relies on the lecturers' methods and needs. So, I feel like being back to campus has taken the flexible learning mode which I used to have while at home during the pandemic.

3.3. Lectırers' Themes

3.3.1. Maximum deeper elaborations when teaching post-COVID-19

All the lecturers wrote that the skills that they have in online teaching are not allowing them to do everything that face-to-face interaction allows, hence the maximum deeper teaching allowance with face-to-face mode.

L1 wrote the following:

> All that I can do when using Blackboard is to join a meeting or a presentation when I have received a link on my email, but I cannot conduct a class myself, but now that we are back, I feel most useful like before (before the pandemic).

This was concurred by L2 who stated that "Now that we are back in class, I manage to teach practical lessons optimally because I specialise in Fitting and turning. I could not do so during the pandemic; however, we still grapple with students' attendance".

A lecturer (L5) from another HEI wrote:

> We have been using an LMS called the Brightspace during the pandemic which was more of a dumping site for student notes and notices. It's only now that we are back to the old ways of traditional teaching that I personally feel comfortable.

L5, on the other hand, stated that "I expect my pass rate to improve because, with the face-to-face teaching, I see the change in the student's response to my lectures even though they dropped in attendance".

In another response, L7 asserted that:

> I have found my way to use these tools (laptops and online platforms) but I have not received any formal training and I only use it to send out assignments and make reminders to my students. I cannot teach virtually as they call it. This is why I went back to physical teaching where I stand in front of my students and teach, but I have noticed a trend of lack of attendance from the students' side.

3.3.2. Unstable gadgets to keep up with online teaching

All the lecturers complain about their gadgets not being stable with online teaching. Some of the lecturers wrote the following (L3):

> I use a MacBook Pro which was given to me by my employer in 2013 and you can imagine its speed now and its power to keep up with the demand of today's technology. This is why I have resorted back to face-to-face teaching.

Her other colleague (L2) wrote:

> I since dropped my laptop to the technical section for it to be fixed and even today I have not received it back. I am told that it needs a new motherboard (whatever that is), and this then made me teach as I used to before, face-to-face teaching.

To add to that, L7 stated that "Using a laptop restricts me to do many things, especially in teaching practical, so I went back to the old ways of teaching and the response to the students that attend, there seems to be progress".

3.3.3. Problems with load shedding

On the issue of the persistent power cuts, all lecturers mentioned load shedding as one of the main issues that make them not teach online.

L1 wrote:

> We all see that our country is struggling to keep the lights on and as such, it will be suicidal to plan an online lesson where the power grid is fragile. In addition, L3 said: I once tried to teach online from my office and I experienced power cuts that affected my network and as such, I was kicked out of the online class and since then, I never tried to teach online because of unstable electricity in the country.

In another response, L4 stated that, "We continue to preach online learning and issues of the fourth industrial revolution (4IR), but those concepts need a stable electricity grid which we do not have as a country, so online will never work in my motherland".

This was echoed by L8 who said:

> Our electricity is weak, and it will disappoint you if you rely on it. When I have network and clear connectivity, some of the students are not able to connect and that makes me repeat a lesson or perhaps post the link of the recording on the institution's LMS, but to access the link of the recording, one needs data and network which puts a strain on the students. So, these power cuts are not helping at all.

3.3.4. Reduced physical attendance during face-to-face classes

Lecturers raised a concern about the drop in students' attendance post-COVID-19. When asked about the current instructional practices, with the impression that online teaching was still effective. In this sense, L1 asserted that, "The continuing challenge now is that students are no longer coming to class as before (pre-COVID-19), and we are not sure if they wanted to revert to online learning or not".

To add to that L3 stated that "The attendance is poor, I know to have 88 students but since we came back to face-to-face classes, I often have less than 50 students".

This was echoed by L4 who wrote:

> The students no longer want to attend, and I wonder why. But during the practical classes they do come because everything is hands-on. L7 said: Non-attendance of our students is often on the agenda of our meetings. Students do stay away from classes, and this will make results drop.

4. Discussion

The above responses paint a bleak future for the future of South Africa's HEIs in keeping up with the world toward technology integration in teaching and learning. This simply shows that the footprints of COVID-19 caused more damage to learning than one could have expected. COVID-19 did not only cut short human life, but it left blemishes that as a country we are not proud of. The HEIs also seem not to be keen on making online teaching and learning work. For a staff member to still complain about not having a proper laptop says more about the seriousness of e-learning in our HEIs. Tam and El-Azar (2020) postulate that one of the effects that the COVID-19 pandemic could bring in the education landscape is an *education system that would be nudged and pushed to change to surprising innovations*, however, this does not seem to be on the cards anytime soon in the country's HEIs. Fry (2001) also attests to this by saying that technology-based e-learning encompasses the use of the internet and other important technologies to produce materials for learning, teach learners, and regulate courses in an organization. However, this does not seem to be the case in South Africa with issues of load shedding and lecturers' lack of training and possession of gadgets still being problematic.

Francis and Webster (2019), and Mbolekwa (2020), postulated that South Africa remains an unequal society nation with severe socio-economic challenges. These challenges are not only experienced in South African HEIs, but also in other African countries, which do not have issues with the digital divide. Algahtani (2011) and Almosa and Almubarak 2005) alludes to this notion that e-learning can work when supported optimally to keep the academic issues going either between lecturers and their students (synchronous) or between students themselves (asynchronous), only when technical support exists. This can be associated with the digital divide that continues to exist in South Africa.

The fact that students were not formally trained to use the online system, is worrisome. Smedley (2010) alludes that e-learning provides the institutions as well as their students the flexibility of time and place of delivery or receipt of according to learning information, students accessed resources at their own time and space. However, the major issue was that they were forced to learn and utilize the LMS system which excited them but did not give them active tasks. This then robbed the students of more precise explanations and further explanations of abstract concepts, which could be detrimental to the output expected as alluded to by Arkorful and Abaidoo (2014). This then disagrees with what Sarı and Keser (2021) said that the transition from face-to-face education to distance education should bring about a change in some roles in the learning-teaching process, but issues of connectivity and lack of training become a hindrance. Being that it may, the role of the teacher in the traditional "blackboard-speaking-textbook" based teaching approach does not assist the students in achieving their own goals, because the current instructional practices, make students wait for the instruction before they can engage with it (Sarı & Keser, 2021).

5. Conclusion

This study gave an account of what COVID-19 did to the HEIs in Gauteng province. With the education system having adopted online teaching and learning due to the outbreak of COVID-19, one would have thought that the adoption of online learning and teaching would continue. However, the challenges that seem to have forced face-to-face teaching were triggered by the lecturers' normalised instructional practices of traditional teaching which they believe in. Some of the lecturers' challenges were from the issues of the continuing load shedding and gadgets that were not conducive to teaching. On the other hand, students, who are mainly Generation Y, came back to class post-COVID-19 with the hope of continuing with online learning, which was not the case. This then created a challenge for students where they started being reluctant to attend classes because of seeing learning to be stagnant and relying mainly on the lecturers. The study recommends that since we are in the digital age, where concepts of the 4IR are the talk of the global community, HEIs need to assist their lecturers with proper training and gadgets for online learning and teaching to continue. This would be to assist the students with learning anytime and anywhere during the day. The continued power cuts across the country need to be addressed if South Africa wants to join the world in advancing technology integration in the HEIs.

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