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The Perceptions of Lecturers and Students on Remote Learning during Covid-19 in Eswatini Institutions of Higher Learning

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Abstract: The educational system across the globe has immensely been affected due to the outbreak of COVID-19, which compelled the shutdown of educational institutions that negatively affected student fraternity all over the world. Due to its infectious nature, COVID-19 necessitated inhibition and imposed social isolation that critically affected personal contact of lecturers and students. In the absence of traditional classroom, computer-based learning has surfaced as the closest alternative for the continuity of teaching-and-learning. Hence this study aimed to examine the students' and lecturers' perceptions on remote learning systems embraced at the tertiary level during the ongoing COVID-19 pandemic in the Kingdom of Eswatini. The study took place between May-September 2021 and it used qualitative research methods. Data from both lecturers and students were collected using qualitative interviews and focus group discussions. The findings of the study revealed students' and lecturers' positive as well as negative perceptions towards remote learning and thus acceptance of this new learning system. It has also empirically established the significance of online learning in the time of the COVID-19 crisis. In fact, remote learning has materialised as a new approach of enhancing the learning process where social media may further improve the learning output. The study concludes that the institutions of higher learning, the government of Eswatini through the Ministry of Education and Training (MoET) and policy makers take this online learning process to the next level in a better way. The study recommends the introduction of computer literacy skills as core subject in tertiary and high schools.

Keywords: Remote Learning And Blended Learning.

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INTRODUCTION

The worldwide spread of the pandemic known as COVID-19 has affected almost all countries and territories. The epidemic was first identified in December 2019 in Wuhan, China, and then spread to adjacent countries and finally the rest of the world. To reduce the rapid spread of the virus, the World Health Organization (WHO) encourages people around the world to maintain social distance, use disinfectants, wash hands with soap regularly before touching faces and surfaces, and wear masks to cover the nose and the mouth, for one to contain droplets and delay transmission, which can ultimately reduce contact rates (WHO, 2020; & González-Sanguino *et al.*, 2020). Sintema (2020) agrees with the above view and mentioned that lockdown and stay-at-home strategies have been implemented as necessary actions to flatten the curve and control the spread of disease.

COVID-19 is in the same class as diseases that once wreaked havoc in the world, such as Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS) (Yadav & Yadav, 2020). COVID-19 is a new disease, and there is no cure as of yet. The virus has primarily been described as a Zoonotic disease, meaning it is transmitted from animals to humans, and with its rapid spread, now the transmission is between humans (Wu *et al.*, 2020).

Africa's first COVID-19 case was recorded in Egypt on 14 February 2020. The disease reached the African continent through travellers returning from hotspots in Asia, Europe and the United States. South Africa reported her first confirmed case on 5 March 2020, and by 13 March 2020, Eswatini also reported her first case. Since March 2020 up to date, there has been a lot of changes, it became mandatory for mankind to adapt to the new normal way of living and doing things, (Eshun-Wilson *et al.*, 2021). The lockdown necessitated that higher education institutions adopt the remote learning mode. The effects of COVID-19 has contributed to the paradigm shift from traditional teaching methods to progressive or technology based teaching-and-learning (Mahaye, 2020).

The COVID-19 widespread has made the biggest disturbance around the world within the education system and applied weight to each range of life. Industries in common had to respond quickly to this pressure, and it came at a gigantic fetched in terms of misplaced time and economy. This led to the temporal but long closure of institutions of education in quite a number of countries around the world, especially those affected by COVID-19. The COVID-19 regulations implied that learning institutions had to shift to online learning exceptionally rapidly to permit coherence in education. Over numerous nations, institutions of higher learning were confronted by a

huge challenge of un-readiness to move to either remote learning or blended learning (Eshun-Wilson *et al.*, 2021).

As a measure to battle the spread of the COVID-19 widespread, The Kingdom of Eswatini to begin with announcing the closing of institutions of education and reduction of trade hours (nationwide lockdown) on Friday 27 March 2020 to avoid advance spread of COVID-19 (the Prime Minister's Statement of 15 April 2020; & Padidar *et al.*, 2021). In between, movements were allowed, offices began functioning, schools and tertiary institutions reopened for selected levels and continued with remote learning for others instead of the traditional face-to-face. The impact is far-reaching and has disturbed learning during the 2020/2021 academic year or even more in the coming days. There was a pressing need to innovate and implement alternative educational and assessment strategies. Therefore, the COVID-19 pandemic has provided Eswatini with an opportunity to pave the way for introducing digital learning (Dhawan *et al.*, 2020).

Most critically, the emergency raised questions about the value of education offered by tertiary institutions which incorporates organizing and networking and social opportunities as well as educational substance. To stay pertinent, institutions of higher education required to rehash their learning situations/environments so that digitalization grows and complements student-teacher and other relations (Schleicher, 2020). Research highlighted certain shortage such as the shortcoming of online education infrastructure, the limited exposure of lecturers to online teaching, the information gap, non-conducive environment for learning at home, equity and academic excellence in terms of higher education (Dhawan *et al.*, 2020).

The closing down of educational institutions caused major intrusions in students' learning processes which comprised of disturbances in internal assessments and the cancellation of open appraisals for capabilities or their substitution by an inferior rated elective (Simon & Hans, 2020; & Simon *et al.*, 2020). Calendars of distinctive institutions in the Kingdom of Eswatini had to be re-adjusted due to COVID-19. Universities and colleges had to move examination dates in order to prepare their examination rooms and guarantee that they were satisfactory for all students (social distancing had to be observed amid exams). The era where lecturers depended on printed instructional materials has moved to an innovation space where classrooms are not as it were constituted of brick and mortar but rather integrated with virtual platforms (Simon 2020; & Gupta *et al.*, 2021).

This study intended to discuss the perceptions of lecturers and students on remote learning during COVID-19 in the Kingdom of Eswatini. Also to find

out the challenges tertiary students and lecturers in Eswatini faced with as they were positioning themselves in the new paradigm shift, and the opportunities presented for students, lecturers and institutions by the new normal as well as strategies used to ensure the continuity of learning during the crises.

Statement of the Problem

Higher institutions of education had sought to utilize technology and offer online classes and learning encounters as a substitute for in-class time to guarantee the progression of instruction in spite of the lockdown. However, numerous colleges and universities battled and needed experience and time to conceive better approaches to convey instruction and assignments. Examinations were also affected, disturbing students' learning trajectories and progression (Schleicher, 2020). In spite of the fact that a few higher education institutions advertised online administrations some time recently the widespread, it was never considered as the sole alternative to in-person physical learning. With the reopening of education institutions for the academic year 2020/2021 seriously compromised and travel likely to stay confined from time to time, lecturers and students were constrained to bargain with the reality of remote learning. The study will discuss the perceptions of lecturers and students' perceptions on remote learning during COVID-19 in the Kingdom of Eswatini.

Objectives of the Study

- To discuss the perceptions of students and lecturers on remote learning during COVID-19 in the Kingdom of Eswatini,
- To find out the challenges faced by lecturers and students as they engage in remote learning,
- To suggest strategies that can be used to make remote learning effective as a teaching-and-learning platform.

Research Questions

- What are the perceptions of lecturers and students on remote learning during COVID-19 in the Kingdom of Eswatini?
- What are the challenges faced by lecturers and students as they engage in remote learning?
- What strategies can be used to make remote learning effective as a teaching-and-learning platform?

LITERATURE REVIEW

Theoretical framework

Since the study sought to discover perceptions of lecturers and students, challenges and strategies that can be put in place to align tertiary institutions with the change that COVID-19 confinements presented, Fullan's change theory as a force for school improvement was adopted. Change theory/change knowledge was chosen because it can be exceptionally capable in informing education reform strategies, and in

turn getting results, but only in the hands, minds, and hearts of individuals who have a deep knowledge of the dynamics of how the components address work to induce specific results, (Fullan, 2007). These components are: standards based reform initiatives; professional learning communities; and qualifications' frameworks that focus on the development and retention of quality educators or pioneers.

The change theory include the following components in its strategy: identification of world class standards in literacy and mathematics, development of curriculum that is based on the standards, a system of assessments mapped onto the standards, and a serious investment in ongoing professional development for school leaders and teachers. It assumes that by aligning key components and driving them forward with lots of pressure and support good things on a large scale will happen. Elmore (2004) emphasizes that educators must learn to do new things in 'the setting in which they work'. Standards based reform by itself does not address changing the setting in which people work, but the driving will of teachers does. This framework perfectly fits this study since it brings about new innovations in addressing change in the setting in which we work. Covid-19 has contributed to the paradigm shift from traditional pedagogical methods to technology based teaching-and-learning. Therefore, institutions of higher learning in Eswatini have to work around their: academic standards and instructional frameworks, assessment and accountability systems, and professional development for standards-based instruction, (Elmore 2004).

RELATED LITERATURE

Perceptions

In a study conducted by Almahasees *et al.* (2021), students' perceptions showed remote learning as a flexible and valuable learning source amid the emergency teaching was perceived to be a relaxed and beneficial source of information. Online learning platforms have assorted devices and tools to accelerate conducive remote collaborative classes to decrease students' loss. Online instruction platforms are designed to share data and coordinate class activities, (Martín-Blas & Serrano-Fernández, 2009). UNESCO (2020); & Huang *et al.* (2020) put forth a number of noticeable interactive online tools that can be utilized in remote learning like: Ding Talk, Home bases Meet, Groups, Skype, We Chat Work, WhatsApp and Zoom. These tools provides; video calls, chat, interactive meetings, audio calls, video sharing, content share and collaboration features. Online learning is more adaptable and helpful within the sense that it gives students the opportunity to learn at any time, at their own pace and anyplace they need as bolstered by (Coroneo, 2021). Coroneo (2021) goes on to say, online learning can improve ones' career prospects, since it permits for individuals to be working full-time and be

enrolled to complete an online program to advance their career prospects.

Bickle *et al.*, (2019) in their study recognized traits that contribute to humanizing online classrooms. These researchers uncovered that students' perception of a high quality course were subordinate upon frequent communication with the lecturers, a foreordained strategy of interfacing students with one another and students' capacity to express their opinions, different group activities and the use of technology permitted online students to form humanistic associations with other students and the lecturers. However, in the case of Eswatini, lecturers had begun engaging students remotely through the different ICT platforms when the Ministry of Education and Training (MoET) finally issued the mandate to adopt remote learning. The adopted remote learning approaches given neglected engagement in terms of meaningful human interaction. Yet, human interaction is basic in any teaching-and-learning circumstance since students are anticipated to develop skills and demonstrate certain competencies (Dlamini, 2020; & Boulle *et al.*, 2020). Indeed, in spite of the fact that students were assigned tasks to work on to demonstrate understanding of taught concepts, very few endeavored to do the given tasks, thus demonstrating a lack of motivation to learn among students, which has been found to be one of the barriers to change in Eswatini (Dlamini *et al* 2020).

In agreement with Dlamini & Vinikas (2021); & Kaur (2021) also recommended that, for successful teaching-and-learning, lecturers ought to regular and timely feedback and guidance through the chat framework on the Moodle system and other similar systems like group emails/chats concurred upon with students like WhatsApp. When live streaming of lessons is to be done, once more, students ought to be informed earlier. However, in Eswatini, technical issues such as electricity blackouts and poor internet coverage can create issues in getting to the web. Subsequently, online sessions should be recorded so that they are accessible to students at a later date or time of the day (Mathabela, 2021). Addisie & Bertacco (2020) further laments that opportunities for incidental learning, peer support, collegiality and communication in the target dialect are moreover decreased in remote learning. Thus, remote learning created a challenge in catering for all students' need.

Various studies have been conducted regarding the association between remote, blended and face-to-face learning with the student community. Garrison *et al.* (1999) designed the community of inquiry model which provides a conceptual framework for remote learning experience. This model relies on the assumption that learning occurs as a function of three primary and codependent elements, namely social presence, cognitive presence and teaching presence. Almahasees *et al.* (2021) also conducted a study in

lecturers and students' perceptions of remote learning during COVID-19. The study's results showed that the lack of interaction between students and their lecturers might lead to low performance, this concurs with Garrison's community of inquiry model above.

Challenges

Students and lecturers confronted a set of challenges through remote learning due to the unexpected move from face-to-face instruction to online instruction. Some students and lecturers found it difficult adapting to online learning due to technical issues such as the lack of ICT competencies, (Almahasees, *et al.*, 2021). Boulle *et al.* (2020) also contended that professional development programs becomes basic to equip all staff members with computer abilities. However, in Eswatini these programs are underfunded and thus lacks continuity, they cannot have the vital impact on lecturers. Both lecturers and students in Eswatini received exceptionally constrained preparing on the use of the new mode of conveyance. For example, in a study by Dlamini (2020); Boulle *et al.* (2020) it was discovered that at William Pitcher College, in theory, both lecturers and students had been able to adapt but there were recurring complaints from staff and students emerging from their inability to keep up with virtual learning activities. Subsequently, it remains to be seen how academic staff utilize the platforms to achieve institutional requirements.

Lecturers and students needed both the information of online learning and the necessary gadgets (laptops, desktops, tablets and or smart phones) required by this mode of learning and internet access. Therefore, lecturers and students had to upgrade their gadgets to match the need. In addition, the transmission capacity (bandwidth) available in Eswatini does not favour most students especially those that come from remote parts of the country. Even those that have network coverage, still straggle with affordability to buy data. A larger proportion of Eswatini students come from disadvantaged background since approximately 63 per cent of the country's populace living below the national destitution line (WFP, 2018; & Skaf *et al.*, 2020). Thus, students encounter challenges as far as adaptation to the new mode of learning.

Browning *et al.* (2021), conducted a study on 'Psychological impacts from COVID-19 among university students: Risk factors across seven states in the United States.' According to the study, tertiary students are increasingly known as a mentally frail populace, which endures from higher levels of misery, anxiety, substance abuse and tumultuous eating compared to the general population. In another survey, Browning *et al.* (2021), conducted on 2,534 tertiary students between mid-March and early-May 2020 to gage the psychological effect of the COVID-19 pandemic on college and university students, it was discovered that more than half of tertiary student had

been among the most strongly affected by COVID-19 because of uncertainty regarding academic success, future careers and social life during college, among other concerns.

Toquero (2020), observed that the COVID-19 pandemic has displayed an ongoing challenge particularly for students with special needs and disabilities as their voices are unheard in typical times and this unfortunate situation is heightened during this emergency. Government approaches amid the pandemic necessitate inclusion for individuals with disabilities who also have their global rights for no one ought to be left behind in this emergency. Just like Eswatini, the Philippine Government was facing some challenges on the provision for the inclusive education and rights of the special needs students, and goes on to highlight the possible educational interventions to supplement their learning amid the pandemic and offers recommendations for the emergency preparedness legislative policies and services to be responsive to the educational, socio-emotional, and mental health needs of the students with disabilities amid the pandemic.

Strategies

Institutions ought to communicate with all students, especially those who are at risk of dropping out, and establish different communication channels in order to be able to reach them on a customary premise. Eswatini may adopt strategies used by the European Students' Union (ESU) by providing contact details of national student unions that stand ready to help and support all students by answering questions about studies, assessments, exams, credits and mobility travels. A similar activity has been taken by Sparqs in Scotland. Another example is that of the University of Bremen in Germany, which is using podcasts to address students' questions and concerns, (Arnhold *et al.*, 2020). Eswatini, tertiary institutions has an assignment to form boards/support groups for the sole purpose of dealing with students' questions and concerns or for psychological support to students in need. Overall, it is critical to gather feedback from students, not only with regards to the content but also modalities of learning, (Brown *et al.*, 2020). So communication ought to too incorporate how students are putting up with the lockdown circumstance and, center on conveying cognitive skills and socio-emotional abilities.

In a study carried by Ferri *et al.* (2020) the findings proposed that criticalities and impediments appeared to be the teachers' skills; students are more skilled in digital issues as they spend a lot of time locked in in computerized communication. Lecturers ought to manage a several operational environment even though in the beginning it is tangled, with technical issues and a lack of knowledge of the options in certain situations. Barr & Mill (2013) also concurs with the above as they identified that the technology devices, design of the program, responsive curriculum,

and supportive stakeholders are necessary and significant for the successful delivery of the lessons in an online environment. In that case, COVID-19 has brought an opportunity for higher institutions of Eswatini to scale up the preparing of the lectures for online learning instruction.

Universities and colleges in developed countries saw it fit to create conditions for peer-to-peer student support. For example, Aarhus University in Denmark encouraged students to continue meeting in study groups online through Skype and other platforms. At Brunel University London, the residence student ambassador provides useful tips on Twitter on how to spend the extra time at home in a constructive way amid the pandemic and shares her favorite TED Talks. At Dublin City University, the Student Support and Development and DCU Healthy have launched a YouTube video channel in which they provide tips for students to stay healthy during the crisis. Eswatini can also make use of social media platforms that are popular amongst students and easily accessible with minimal costs like; Facebook, WhatsApp channels, can also have a newspaper column in which coping strategies may be published every day or once a week, or even aired on national radio as means to help students keep up with the shift to remote learning.

Toquero (2020) advance recommend that, due to worldwide patterns of the widespread, higher instruction must prioritize the scholarly, career directing, and indeed the therapeutic administrations and programs that ought to be accessible to the understudies within the college and indeed through online implies. Free virtual administrations such as restorative directing, mental wellbeing teleconferencing, and other related online wellbeing administrations from restorative staff agents and proficient wellbeing specialists such as clinicians and direction counselors ought to be promptly open for the understudies indeed exterior the centers (Hinderaker, 2013; & Toquero, 2020).

Toquero (2020) further recommend that, due to worldwide patterns of the pandemic, higher education institutions must to prioritize the academic, career counselling, and even the medical services and programs that should be accessible to the students in the institution and even through online means. Free virtual administrations such as medical counselling, mental wellbeing teleconferencing, and other related online health services from medical staff representatives and professional health experts such as psychologists and guidance counselors ought to be promptly accessible for the students even outside the centers (Hinderaker, 2013; Toquero, 2020).

RESEARCH METHODOLOGY

This research study used qualitative research approach, because it gives the researcher a unique depth

of understanding; participants are able to freely disclose their encounters, thoughts and sentiments without constraints, (Tiley *et al.*, 2017), participants have the opportunity to openly expand on their answers. According to Peterson *et al.* (2021), qualitative research clearly explain 'how' and 'why' a particular phenomenon, or behaviour, operates as it does in a specific context, it offers the chance to develop specific insights, and it also turns individual experiences into usable data. Thus, students and lecturers perceptions on remote learning during COVID-19 were discussed.

Research Design

In this particular study a case study was used. According to Simons (2009); & Rebolj (2013) a case study is an in-depth investigation from multiple perspectives of the complexity and distinctiveness of a specific project, policy, institution, program or framework in real life. A case can be analytically, holistically, hermeneutically, culturally, and by blended strategies, but we concentrated, at least for the time being, on the case: perceptions of lecturers and students on remote learning during COVID-19 in the Kingdom of Eswatini (Stake 2005; Rebolj 2013; Yurtkuran, & Taneli, 2013). This technic is most suitable for this study since it enabled the researcher to collect original data from samples and permits the use of interviews and focus group discussions, hence high reliability was retained. Just like in this study, a case study is used to analyze attitudes, opinions, behaviors and other defined variables and generalize results from a sample population.

A set of moral principles, rules, or standards that regulate the behaviour of people are referred to as ethics and research that involves human beings should comply with requirements that govern ethical behaviour (Niglas, 2010). The researcher here observed the research ethical principles so as to protect the dignity, rights and safety of participants. Honesty about the researcher's identity, the purpose and objectives of the study were communicated to participants before commencement of data collection. The identity of participants remained anonymous. Thus, data and information pertaining to this study remain confidential. Interview notes and transcripts excluded personal identifiers. Data were coded: (S) for students' participants and (L) for lecturer participant and thematically analyzed. Consent forms expressing the participants' voluntary participation and the right to withdraw at any time so as to safeguard and protect their rights without any penalty were given to participant in time to read and sign in agreement to take part in the study. The study addressed the issue of credibility and validity through triangulation (by data; where data was collected from both students and lecturers and by method; where individual interviews were used then focus group discussions to validate submissions from the interviews), (Noble & Heale, 2019).

FINDINGS

The dominant narrative that emerged from the lecturers and students was that of unreliable infrastructure: that is internet connectivity and lack of adequate power supply. Anie (2015) alludes to the fact that stable electricity system is an indispensable foundation in the proper functioning of information infrastructure. In spite of this awareness, African countries with no exception to Eswatini, have been characterized with poor provision of electricity (Anyanelue, 2006; & Anie 2015). Effective automation and the use of ICT depends on reliable power supply, but electricity power supply in Africa is epileptic, Eswatini inclusive. So students and lecturers encounter challenges as they engage in online teaching-and-learning. If a power cut happens during test and examination, it appear as though students have abandoned the assessment session, therefore, affected students may have to give reasons for abandoning the assessment and sometimes even loss marks as a penalty for late submission, in extreme cases, they retake the test based on suspicions of foul play and as a result they are awarded fifty percent regardless of high scores achieved. Some participant remarked:

Eswatini as a country suffers limited network availability (bandwidth) and unannounced electricity cuts, which then compromise our attendance in online classes. (FGD)

The accessibility of high-speed broadband or cellular web association is uncommon exterior the city ranges; hence, understudies in country zones are ceaselessly confronting inconvenience getting a steady web association. Hence, their support in online classes is regularly profoundly influenced. Eswatini too confront issues with unannounced power cuts which is an extra unsettling influence indeed to those understudies who dwells within the city. Moreover, understudies frequently don't have electronic contraptions to take part in online classes successfully. Other contributing components to students' under-achievement is the reality that they cannot connected with the speakers and their classmates amid online classes. The bunch work openings among understudies is additionally limited.

The availability of high-speed broadband or cellular internet connection is rare outside the city areas; thus, students in rural areas are continuously facing trouble getting a stable internet connection. Therefore, their participation in online classes is often highly affected. Eswatini also face issues with unannounced electricity cuts which is an additional disturbance even to those students who resides in the city. Moreover, students in Eswatini, especially those who come from working class families often do not have electronic gadgets needed to participate in online classes effectively. Other contributing factors to students' under-achievement is the limited chance to interact with the lecturers and their classmates during

remote learning. The group work opportunities among students is also restricted.

Amongst other challenges in Eswatini, limited finance is a thorn on tertiary students' flash. Students and families have been challenged by job losses and health risks presented by the pandemic, (Harnisch *et al.*, 2021). Due to lockdown, some businesses had to close and companies had to retrench living families with nothing to sustain them financially. This affected mostly students from the low socio-economic class and also those that are self-funded, since they had to buy suitable gadgets for remote learning and buy data or service Wi-Fi for connectivity. Some participants remarked:

Institutions should at least provide us with data for every month or decrease tuition fee so that we are able to buy data and to buy proper gadgets like tablets, laptops and Wi-Fi routers. (S6)

For online learning not to discriminate, the government should consider installing community Wi-Fi Hotspots in every corner of the country to allow our student free access to the internet. (L2)

Remote learning has created discrimination between country side and urban students, between laptop/PC users and mobile phone users, between WI-FI users and mobile network users, between rural and urban high school graduates. Thus, a sustainable learning and teaching medium is greatly affected. To eliminate the discrimination, institutions of higher learning in collaboration with the government and service providers (Eswatini MTN, Eswatini mobile and Eswatini Telecommunication Company) may arrange to sell gadgets to students at affordable prices and offer special study data packages for students. The data can be used for selected educational websites and online teaching-and-learning tools. In addition NGOs and companies may also donate gadgets to students around the communities in which they work, as way of giving back to the community.

On another note, remote learning came as a blessing to some students in Eswatini *et al.* (2020) concluded that remote learning had some benefits like efficiency, cost-effectiveness and twenty-four hour access to instruction. Online learning is characterized by flexibility as it permits students to formulate their individual study schedule, even if one has conflicting commitments such as work, health conditions preventing them from leaving their home and caring for a family member, can still be enrolled. For some students remote learning is perceived as cheaper because it relieved them the burden of travelling, finding a place to stay near the institution and feeding (Piletic, 2018).

We receive learning materials online and stay available for as long as we need them, like

modules, notes, assignment questions, videos, audios, etc.(S3)

Remote learning has improved my technology skills, and again I save some money from transport cost and lunch out, and I use part of that money to buy data. (S1)

It would appear students in Eswatini perceive the online approach as quite manageable in terms of time and resource accessibility. Remote learning initiated students' role in using additional resources to discover their abilities as independent learners, (Roach & Lemasters, 2006). For majority of students, online learning has emerged as a convenient option when it comes to flexibility of time and geographical space, where teaching-and-learning are independent of any geographical location, time or place.

CONCLUSIONS

It is exceptionally clear that both the lecturers and students in Eswatini are trying hard to familiarize themselves with this recently introduced mode of learning. Lecturers and students have mixed perceptions about remote learning, but a majority of both found remote learning as a blessing while a few encounter some challenges. The aim of this study was to find perceptions of lecturers and students on remote learning during COVID-19 in the Kingdom of Eswatini.

Recommendations

The government of Eswatini should work towards identifying weaknesses in infrastructure, including power/electricity and broadband and equipment to strengthen when possible, for example, through providing access to community hotspots both in urban and rural areas and gadgets (tablets) to needy students, etc.

Government of Eswatini should build a comprehensive plan for the students to benefit through online classes and take necessary steps to reduce the discrimination created by the remote learning system.

The institutions of higher learning, in collaboration with government and service providers may provide students with gadgets and data at affordable prices to enable students to take part in remote learning and access to online libraries and other research programs pertaining their studies.

Institutions should have students ambassadors who will provide useful tips on platforms like Twitter, Instagram and Facebook on how to spend the extra time at home in a constructive way and how to deal with stress and depression. Institutions may also have YouTube channels in which they will provide tips for students to stay healthy during the crisis.

With the help of the government, institutions should consider establishing dedicated: financial,

logistical and psychological students support programmes. These may include tackling the issues of anxiety and stress in light of COVID-19, as well as a strong focus on the mental well-being of students by providing a series of mindfulness online tips to help reduce stress.

REFERENCES

1. Addisie, A., & Bertacco, V. (2020, July). Centaur: Hybrid processing in on/off-chip memory architecture for graph analytics. In *2020 57th ACM/IEEE Design Automation Conference (DAC)* (pp. 1-6). IEEE.
2. Almahasees, Z., Mohsen, K., & Amin, M. O. (2021). Faculty's and students' perceptions of online learning during COVID-19. *Front. Educ*, *6*, 638470.
3. Anie, S. O. (2015). Internet accessibility: challenges before the African Nations. *Information Impact. Journal of Information and Knowledge Management*, *6*(2), 207-211.
4. Arnhold, N., Brajkovic, L., Nikolaev, D., & Zavalina, P. (2020). Tertiary Education and COVID-19: Impact and Mitigation Strategies in Europe and Central Asia. *Regional Note, World Bank Education Global Practice, Washington, DC*.
5. Barr, B. A., & Miller, S. F. (2013). *Higher Education: The Online Teaching and Learning Experience*. Online Submission.
6. Bickle, M. C., Rucker, R. D., & Burnsed, K. A. (2019). Online learning: Examination of attributes that promote student satisfaction. *Online Journal of Distance Learning Administration*, *22*(1), n1.
7. Boulle, A., Davies, M. A., Hussey, H., Ismail, M., Morden, E., Vundle, Z., ... & Stek, C. (2020). Risk factors for COVID-19 death in a population cohort study from the Western Cape Province, South Africa. *Clinical infectious diseases: an official publication of the Infectious Diseases Society of America*.
8. Brown, M., McCormack, M., Reeves, J., Brook, D. C., Grajek, S., Alexander, B., ... & Weber, N. (2020). 2020 Educause Horizon Report Teaching and Learning Edition (pp. 2-58). *EDUCAUSE*.
9. Browning, M. H., Larson, L. R., Sharaievskaya, I., Rigolon, A., McAnirlin, O., Mullenbach, L., ... & Alvarez, H. O. (2021). Psychological impacts from COVID-19 among university students: Risk factors across seven states in the United States. *PLoS one*, *16*(1), e0245327.
10. Coroneo, M. T. (2021). The eye as the discrete but defensible portal of coronavirus infection. *The ocular surface*, *19*, 176-182.
11. Dhawan, G., Kapoor, R., Dhawan, R., Singh, R., Monga, B., Giordano, J., & Calabrese, E. J. (2020). Low dose radiation therapy as a potential life saving treatment for COVID-19-induced acute respiratory distress syndrome (ARDS). *Radiotherapy and Oncology*, *147*, 212-216.

12. Dugue, P. A., Rebolj, M., Garred, P., & Lynge, E. (2013). Immunosuppression and risk of cervical cancer. *Expert review of anticancer therapy*, 13(1), 29-42.
13. Elmore, R. F. (2004). *School reform from the inside out: Policy, practice, and performance*. Harvard Education Press. 8 Story Street First Floor, Cambridge, MA 02138.
14. Eshun-Wilson, I., Mody, A., McKay, V., Hlatshwayo, M., Bradley, C., Thompson, V., ... & Geng, E. H. (2021). Public preferences for social distancing policy measures to mitigate the spread of COVID-19 in Missouri. *JAMA Network Open*, 4(7), e2116113-e2116113.
15. Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. *Societies*, 10(4), 86.
16. Fullan, M. (2007). *The new meaning of educational change*. Routledge.
17. Garcia-Olivé, I., Sintes, H., Radua, J., Capa, J. A., & Rosell, A. (2020). D-dimer in patients infected with COVID-19 and suspected pulmonary embolism. *Respiratory medicine*, 169, 106023.
18. González-Sanguino, C., Ausín, B., Castellanos, M. Á., Saiz, J., López-Gómez, A., Ugidos, C., & Muñoz, M. (2020). Mental health consequences of the coronavirus 2020 pandemic (COVID-19) in Spain. A longitudinal study. *Frontiers in Psychiatry*, 11, 1256.
19. Gupta, S., Nguyen, T., Raman, S., Lee, B., Lozano-Rojas, F., Bento, A., ... & Wing, C. (2021). Tracking public and private responses to the COVID-19 epidemic: evidence from state and local government actions. *American Journal of Health Economics*, 7(4), 000-000.
20. Gurley, L. E. (2018). Educators' Preparation to Teach, Perceived Teaching Presence, and Perceived Teaching Presence Behaviors in Blended and Online Learning Environments. *Online learning*, 22(2), 197-220.
21. Huang, R., Liu, D., Tlili, A., Knyazeva, S., Chang, T. W., Zhang, X., ... & Holotescu, C. (2020). Guidance on open educational practices during school closures: Utilizing OER under COVID-19 pandemic in line with UNESCO OER recommendation. *Beijing: Smart Learning Institute of Beijing Normal University*.
22. Kaur, S. (2021). *Online learning factors that influence the student's learning outcomes*.
23. Lokhandwala, S., & Gautam, P. (2020). Indirect impact of COVID-19 on environment: A brief study in Indian context. *Environmental research*, 188, 109807.
24. Mahaye, N. E. (2020). The impact of COVID-19 pandemic on education: navigating forward the pedagogy of blended learning. *Research online*.
25. Martín-Blas, T., & Serrano-Fernández, A. (2009). The role of new technologies in the learning process: Moodle as a teaching tool in Physics. *Computers & Education*, 52(1), 35-44.
26. Mathabela, N. N. (2021). Library Services During the Covid-19 Pandemic: A Case of the University of Eswatini (UNESWA). *The Christian Librarian*, 64(1), 12.
27. Nguyen, S., Fishman, R., Weeden, D., & Harnisch, T. (2020). The Impact of COVID-19 on State Higher Education Budgets: A Tracker of Responses from State Higher Education Systems and Agencies. *New America*.
28. Niglas, K. (2010). The multidimensional model of research methodology. *SAGE handbook of mixed methods in social & behavioral research*, 215-236.
29. Noble, H., & Heale, R. (2019). *Triangulation in research, with examples*.
30. Padidar, S., Liao, S. M., Magagula, S., Mahlaba, T. A. A., Nhlabatsi, N. M., & Lukas, S. (2021). Assessment of early COVID-19 compliance to and challenges with public health and social prevention measures in the Kingdom of Eswatini, using an online survey. *Plos one*, 16(6), e0253954.
31. Peterson, Z. D., Vaughan, E. L., & Carver, D. N. (2021). Sexual identity and psychological reactions to COVID-19. *Traumatology*, 27(1), 6.
32. Piletic, P. (2018). *Lower costs are making more students prefer online education*. Retrieved February, 11, 2020.
33. Roach, V., & Lemasters, L. (2006). Satisfaction with online learning: A comparative descriptive study. *Journal of Interactive Online Learning*, 5(3), 317-332.
34. Schleicher, A. (2020). *The impact of COVID-19 on education insights from education at a glance 2020*. Retrieved from [oecd.org website: https://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance-2020.pdf](https://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance-2020.pdf).
35. Simon, H. U., Yousefi, S., Germic, N., Arnold, I. C., Haczku, A., Karaulov, A. V., ... & Rosenberg, H. F. (2020). The cellular functions of eosinophils: Collegium Internationale Allergologicum (CIA) update 2020. *International archives of allergy and immunology*, 181(1), 11-23.
36. Sintema, E. J. (2020). Effect of COVID-19 on the performance of grade 12 students: Implications for STEM education. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(7), em1851.
37. Skaf, L., Buonocore, E., Dumontet, S., Capone, R., & Franzese, P. P. (2021). Integrating environmental and socio-economic indicators to explore the sustainability of food patterns and food security in Lebanon. *Current Research in Environmental Sustainability*, 3, 100047.
38. Tiley, K., White, J., Andrews, N., Tessier, E., Ramsay, M., & Edelstein, M. (2019). What school-level and area-level factors influenced HPV and MenACWY vaccine coverage in England in 2016/2017? An ecological study. *BMJ open*, 9(7), e029087.

39. Toquero, C. M. (2020). Challenges and opportunities for higher education amid the COVID-19 pandemic: The Philippine context. *Pedagogical Research*, 5(4).
40. Wu, A., Peng, Y., Huang, B., Ding, X., Wang, X., Niu, P., ... & Jiang, T. (2020). Genome composition and divergence of the novel coronavirus (2019-nCoV) originating in China. *Cell host & microbe*, 27(3), 325-328.
41. Yadav, M., Kumar, R., & Krishnamurthy, R. (2020). Chemistry of abiotic nucleotide synthesis. *Chemical reviews*, 120(11), 4766-4805.
42. Yurtkuran, S., & Taneli, Y. (2013). Medium of 'Curiosità': An innovative studio environment for design education. *Art, Design & Communication in Higher Education*, 12(1), 65-90.