



**A comparative analysis on impact of Covid-19 on
Bachelor of Indigenous Knowledge Systems
students in South Africa**

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degree Master of Indigenous Knowledge Systems at the
North West University

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DECLARATION

I, Kapsell Kwena Semenya, declare that the dissertation for the Degree of Master of Indigenous Knowledge Systems (MIKS) at the North-West University, hereby submitted, has not been previously submitted for a degree at this or any other university. Therefore, it is my own work in design and execution and that all resources herein contained has been appropriately acknowledged.

Signature: *KK Semenya*

Date: 05/08/2023

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DEDICATION

This study is dedicated to South African universities offering Indigenous Knowledge Systems qualifications, especially North-West University and University of Venda as they are the only universities in South Africa which currently offers Bachelor of Indigenous Knowledge Systems as a qualification. It is also dedicated to all indigenous knowledge systems custodians, aboriginal researchers, varying higher education institutions and students studying Bachelor of Indigenous Knowledge Systems and other linked qualifications in all parts of Africa.

LIST OF ABBREVIATIONS AND ACRONYMS

BIKS	Bachelor of Indigenous Knowledge Systems
CDC	Centres for Disease Control and Prevention
CIKS	Centre in Indigenous Knowledge Systems
CLTD	Centre for Learning, Teaching, and Development
CSI	Council for Science and Industrial Research
DST	Department of Science and Technology
EVA	Emergency Virtual Assessment
FNAS	Faculty of Natural and Agricultural Sciences
HRW	Human Rights Watch
ICT	Information Communication technology
IK	Indigenous Knowledge
IKS	Indigenous Knowledge Systems
IKSM	Indigenous Knowledge Systems Module
IRT	Information Richness Theory
MERS-CoV	Middle East Respiratory Syndrome Coronavirus
NRF	National Research Foundation
NSFAS	National Student Financial Aid Scheme
NWU	North-West University

SANBio	The South Africa Network for Biosciences
SAQA	South African Qualifications Authority
SARS	Severe Acute Respiratory Syndrome
SARS-CoV	Severe Acute Respiratory Syndrome Coronavirus
TUT	Tshwane University of Technology
UCT	University of Cape Town
UL	University of Limpopo
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations
UNISA	University of South Africa
UNIVEN	University of Venda
UP	University of Pretoria
WHO	World Health Organization
WSU	Walter Sisulu University

GLOSSARY OF LOCAL LANGUAGES TERMS

Amadlozi - Ancestors

Badimo - Gods/ Ancestors

Botho - Humanity

Hlompho - Respect

Isifom - Virus

Kitso ya tlhago - Indigenous Knowledge

Lekgotla - Group meeting

Lengana - African wormwood

Mafahla - Lungs

Makgoma - Gonorrhoea

Malwetsi - Diseases

Mogare wa Corona - Coronavirus

Mogolo - Huge

Muthi - medicine

Onyame - Supreme God

Tlhago - Nature

Ubuntu - humanity

Yunibesithi ya Bokone-Bophirima - North-West University

CONFERENCE PRESENTATIONS AND RESEARCH PUBLICATIONS

EMERGING FROM THE STUDY

Conference presentations

Semenya, K.K., Maditsi, M.E & Koitsiwe M.T (2022). The Impact of COVID-19 on teaching and learning of the Bachelor of Indigenous Knowledge Systems: Voices and perspectives from North-West University students. Paper presented in correspondence with “The new normal, teaching, learning and methodologies in times of Covid-19” subtheme at 19th Annual National Oral History Conference 2022 hosted at Northern Cape, Kuruman on the 10-14 October 2022.

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ABSTRACT

The emergence of Covid-19 influenced the implantation of lockdown regulations. Pedagogies transitioned from online to face-to-face frequently depending on the rate spread of the virus. Hence, the researcher explored and compared the impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in the North-West University (NWU) and University of Venda (UNIVEN). Furthermore, challenges and benefits of using Information Communication Technologies (ICTs) and transitioning from online back to face-to-face pedagogy were investigated by implementing a mixed method approach.

Qualitative data was collected from 5 NWU students and 3 students from UNIVEN by using focus group interviews and analysed using of thematic analysis whereas quantitative data was gathered from 33 NWU students and 15 UNIVEN students via Conjoint analysis survey platform and automatically analysed by the system in the form of bar graphs and pie charts. Qualitative data indicated that $n = 8$ while quantitative data showed that $n = 48$ of participants from NWU and UNIVEN combined. Among these participants, there were undergraduates from different level of years.

Interpretivist paradigm was applied to assist in interpreting qualitative data collected with relevant theories such as Indigenous theory of contagious disease, Cultural discontinuity theory, Constructivist learning theory and Ubuntu as an African moral theory. This was done to give the study a good theoretical base to shape the perspective and direction of the study. Major findings revealed that 24.2% of NWU students gained from transition of pedagogy while 75% of participants demonstrated that they were negatively affected the transition due to Covid-19 lockdown.

Consequently, 13.3% of UNIVEN students benefited from the transition of pedagogy while the other 80% confirmed to have been challenged by the transition. Similar challenges experienced with the use of ICTs were a lack of knowledge on how to use devices, lack of devices and data, poor network connectivity, lack of interaction with peers and lecturers. However, NWU students benefited from the use of ICTs by being able to review recorded class sessions, development skills of using technology, access to devices and communication skills while UNIVEN students indicated that they experienced flexibility of online learning, gained time management skills and independence.

NWU students stated that the transition from online to face-to-face challenged them as they experienced cancellation of lectures without notice from their lecturer and inability to interact effectively due to face masks. 81.8% of participants from NWU declared that they benefited from the transition of pedagogy while 18.2% confirmed that they did not benefit. UNIVEN students mentioned that there was lack of opportunity to use technology, low self-confidence to ask questions and respond, and receiving study materials on time.

Results of this study influence the emergence of the hybrid learning model to be implemented in higher education as part of pedagogical approaches to education because students have shown the benefits they harvested from online teaching and learning and interest in using it as part of their learning model. NWU is in a quest to pilot hybrid learning on selected courses to increase success of students and meet the needs and preferences of students.

Key words: Cosmology, Covid-19, Indigenous Knowledge Systems, Lockdown, Pandemic, Pedagogy

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Chapter One

Introduction

1.1 Background of the study

All universities in South Africa have experienced the impact of Covid-19 on teaching and learning and activities including North-West University and the University of Venda. As predicted by Van der Wait (2018), the early history of North-West University was traced back from 1961 to 2003. Although North-West University history is not fully documented, the university is locally known as *Yunibesithi ya Bokone-Bophirima* became officially known on the 1st of January in 2004 (Studyportals, 2019; North-West University, 2022).

The North-West University has eight faculties in all three campuses namely Potchefstroom, Vanderbijlpark, and Mafikeng. Potchefstroom and Mahikeng campuses are in the North-West Province whereas Vaal Triangle is found in Gauteng province (Evert 2019; LinkedIn, 2022). Mafikeng campus was later changed into Mahikeng campus and in compliance with the history of the campus, also, the surrounding community members claim that they are the ones who built it from the ground through teamwork.

In the newsletter of UNIVEN (2012), it was cited that “University of Venda was established as a branch of the University of the North on 18 January 1981, one of the last universities to be established in South Africa”. University of Venda was found in 1982 (Netshakhuma, 2019; Khumalo, 2018). It is one of the comprehensive universities found in the rural area of Thulamela Municipality under Vhembe district (Tlakula & Fombad, 2017; Iwara, *et al.*, 2018; Manjowe, 2017). The university was built to serve Black people, particularly Venda speaking community (Ndou, 2018). However, all tribes in South Africa study at any university of their choice.

Bachelor of Indigenous Knowledge Systems students were affected by Covid-19 lockdown regulations, closure of universities and the change of pedagogy from face-to-face to online using Information Communication Technologies (ICTs). Bachelor of Indigenous Knowledge Systems is a program developed as a result of the growing extinction of Indigenous Knowledge Systems. North-West University is the first university that produced Bachelor of Indigenous Knowledge Systems graduates in 2017 (Southern Africa Network for Biosciences, 2017).

North-West University (2021) mention that Bachelor of Indigenous Knowledge Systems is a four-year inter-multi-disciplinary specialized degree known as *Kitso ya tlhago* in Setswana. University of Venda (2021) argue that Bachelor of Indigenous Knowledge Systems is under the School of Human and Social Sciences at the University of Venda. Whilst, at the North-West University, Bachelor of Indigenous Knowledge Systems is hosted by the Indigenous Knowledge Systems Centre under the Faculty of Natural and Agricultural Sciences. University of Limpopo and other universities are in the process of developing Indigenous Knowledge Systems-based programmes (Centre Indigenous Knowledge Systems, 2021).

Furthermore, students studying Bachelor of Indigenous Knowledge Systems learn about African indigenous health care systems, African indigenous astronomy, African indigenous languages, African indigenous science and technology, African indigenous law, African cultural heritage, African indigenous education, African indigenous leadership and governance, African indigenous agriculture, and other aspects of life. However, University of South Africa, University of Limpopo and University of KwaZulu-Natal are currently in the process of developing the program while they offer indigenous knowledge systems related courses.

In 2004 Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) emerged while on the other hand, Middle East Respiratory Syndrome Coronavirus (MERS-CoV) emerged in 2012 and they both affected humans in their respiratory system (Hu *et al.*, 2021). In the year of 2019, the first case of SARS-CoV-2 was discovered in China, Wuhan City (Zhu, *et al.*, 2020; Zu *et al.*, 2020; Hu *et al.*, 2021; Lin *et al.*, 2020; WHO, 2020; Nourah, 2020; Anderson, 2020; Parasher, 2021).

McIntosh (2020) posit SARS-CoV-2 is one of the coronaviruses found in the year of 2019. Coronaviruses are a collection of viruses that causes diseases in humans and animals (Kandola, 2020). Thus, the severe acute respiratory syndrome virus known as SARS-CoV is an example of coronaviruses (Harapan *et al.*, 2020; Shangguan *et al.*, 2020). Lau and Chan (2015) argue that diseases related to SARS-CoV are commonly found in bats around the world.

Shereen *et al.* (2020) mention that Covid-19 started to spread around the world due to migration of people from one area to another. Zhai *et al.* (2020) argued that the first case of Covid-19 reported in the United States was on the 20th of January 2020 (Hu *et al.*, 2021; Lim *et al.*, 2021; Figueiredo *et al.*, 2020). Mkhize (2020) reports that on the 5th of March 2020, a 38-year-old man who migrated from Italy to South Africa with his female partner spread Covid-19 to ten people who travelled with them. As a result of the rapid rising number of deaths around the world, World Health

Organization regarded Covid-19 as a pandemic (Wiersinga *et al.*, 2020; Cascella *et al.*, 2022; Horn *et al.*, 2020). The issue was raised on the 12th of March 2020 (Dlamini, 2020). For that reason, governments around the world responded to the pandemic by implementing Covid-19 lockdown regulations to combat the spread.

The first Covid-19 lockdown was alert level 5 with strict regulations which became effective on the 26th of March in South Africa (Schroder *et al.*, 2021; Stiegler and Bouchard, 2020: 695; Pillai *et al.*, 2020: 1119). During the period of Lockdown alert level 5, no movement of people or goods were allowed and public transports were prohibited (Department of Co-operative Governance and Traditional Affairs, 2020: 06). This indicated that students and lecturers could not come to the university to perform their usual duties.

This does not rule out of the fact that, In South Africa, people were allowed to move from their residences to the nearest shops to buy necessities such as medication and food while following strict Covid-19 regulations. Throughout Covid-19 lockdown alert level 4, all gatherings excluding funerals are prohibited (Department of Co-operative Governance, 2021: 04). University outdoor activities were postponed until further notice resulting pending graduation ceremonies, school trips and outdoor research activities including indigenous knowledge systems community engagement activities.

Department of Basic Education (2020: 06) states that learners who were in grade 7 to grade 12 may return to school on the 1st of June 2020. While on the other hand, 33% students returned to their respective campuses in accordance with phases and needs during Covid-19 lockdown level 3 and 66% will return in Covid-19 lockdown level 2 (Department of Higher Education and Training, 2020: 07). Students who live close to campus, final year students who needs university equipment such as tangible library study materials and laboratory returned to campuses.

Throughout Covid-19 lockdown level 2, students in all years returned to their university campuses including university staff. The Department of Basic Education (2022) specify that all learners may return to traditional education during the 2022 academic year but education institutions still needed to ensure that those learners adhered to the Covid-19 regulations at all times to prevent and combat the spread of Covid-19 under alert level 1. Since international and national travelling was allowed, international students were able to travel to their respective universities to pursue with their academics.

Molefi *et al.* (2020) concluded that “the lockdown policy managed to significantly decrease the incidence of Covid-19 in China”. Broadbent *et al.* (2020) indicates that on the 15th of March, the South African government urgently responded to the global pandemic by issuing a national lockdown as State of Disaster. It was on the 15th of March 2020 (Lyer, 2020; Meyer, 2022). The national lockdown alert level five includes strict regulations that caused the closure of universities and schools, cancelled outdoor events and social gatherings, restricted travelling to domestic and international purposes and limited business and commercial activities (Pillai *et al.*, 2020; Wysonge, 2020; Maluleke, 2020; Engzell *et al.*, 2021; HRW, 2020).

Furumele (2021) points that South Africa has nine provinces, and more outbreaks of Covid-19 was established in Gauteng and KwaZulu Natal more than other provinces. Nevertheless, Covid-19 cases increased even during lockdown level five due to people breaking the lockdown regulations (Arashi *et al.*, 2020). However, the more people break the Covid-19 regulations, the more people got sick and pressure is being applied to health care institutions. For instance, beds in hospitals became scarce since they were occupied by people who tested positive for Covid-19 and in severe health condition.

The decline of Covid-19 cases allows the government to ease the lockdown regulations of which allows universities to respond to them and make changes on the method of teaching and learning. Panganayi (2020) argues that “the lockdown involved prohibiting people from leaving their homes”. These includes students and staff being prohibited to attend physical contact classes during Covid-19 lockdown level five, four, three and two. Van Schalkwyk (2020) revealed that during lockdown alert level three, majority of students returned to campus for physical contact classes. Every decision made by the government affected university staff and students (Menon & Motala, 2021). However, the government made decisions to protect people from being infected with Covid-19 (Kunyumba & Shabangu, 2021).

North-West University management committee responded to the lockdown restrictions connected to the Covid-19 pandemic by approving the following measures such as taking the university students and staff to go on recess from 17th to 29th of March 2020, postponing graduation ceremonies until further notice, shifting the curriculum of teaching and learning from physical contact to remote teaching and learning while allowing postgraduates students to do practical based work under strict access when applicable, allowing library services to be online and allowing students to leave campus residences when they need to and granting permission to those who are

unable to vacate campus residences (University-Management-Committee, 2020). The University of Venda also responded to the Covid-19 lockdown regulations the same way as other universities did.

Nthambeleni (2020) informed all staff and students at the University of Venda on the 17th of March 2020 that student residences were asked to vacate from the residences, lectures were suspended with immediate effect until the 13th of April 2020 while university operations continued normally and international travel and hosting of international visitors was suspended until further notice. All institutions of higher learning abided by the guidelines of Covid-19 lockdown regulations with immediate effect after the statement update speech by the president, Cyril Ramaphosa in 2020.

North-West University Management Committee (2020) alludes that recess will be activated from 17th of March 2020 to 29th of March 2020, all graduation ceremonies were postponed, teaching and learning occurred online using *eFundi* from 30th of March to 30th April 2020. Moreover, students choosing to vacate university premises had to continue learning online while others remained and studied on-campus (University Management Committee, 2020).

Department of Communications and Marketing (2020) mentioned that on the 23rd of March 2020, a project of producing sanitizers and surface disinfectant at the laboratory of the University of Venda took place. NWU Vice-Chancellor, Kgwadi (2020) points that staff were advised to work from home and permitted to take the university equipment to their homes by filling the authorization for use of assets off-campus form. On the 28th of March 2020, a document containing rules to follow at the campus under Covid-19, penalties for breaking the rules, hand washing protocol guidelines and respiratory and cough hygiene guidelines was issued to staff and students (UNIVEN Transversal Committee, 2020). Balfour (2020) addressed the challenges of students to adapt successfully to online teaching and learning such as provision of devices.

Magadani (2021) cited that face-to-face teaching and learning will be permitted for first year students while the rest of the student proceeded with online teaching and learning but only 100 people were permitted to be in a class venue during Covid-19 lockdown level 2. On the 29th of May 2020, it was reported that final year students and postgraduates may return to campus for clinical training programmes and access to labs or technical equipment (du Plessis, 2020). Department of Marketing, Branding and Communications (2021) published that the University of Venda was issued to be the vaccinating site to combat against Covid-19. The North-West

University students and staff were advised to vaccinate against Covid-19 (North-West University Management, 2021; Kgwadi, 2021).

Kgwadi (2020) informed students and staff on the 24th of March 2020 that they should work from home and access to the campus premises will be restricted by providing permits to control the spread of Covid-19. “The Covid-19 is available on the *eFundi* site under the Covid-19 training tab” (LibAnswers, 2021). Shepherd and Mohohlwane (2021) specified that education institutions where remote teaching and learning were already utilized had an advantage of adapting to the ‘*new normal*’. However, North-West University was not fully prepared to change the pedagogy from physical contact to online due to lack of necessary resources since it was an emergency response to Covid-19 lockdown regulations.

Guidelines available on South African universities for students returning to the university premises change overtime depending on the changes of Covid-19 lockdown regulations. Lithuli *et al.*, (2020) outlined that student who require clinical training in their field of study, final year students who are soon to graduate and require access to university WIFI, residence, data, library, and laboratory equipment were allowed to return to campus at the Durban University of technology.

When the country moves or remain to a certain Covid-19 lockdown alert level, universities also alter the current implemented regulations to respond to the national lockdown regulations. The North-West University guidelines document dated 31st May 2021 was replaced by the one on the 29th of June 2021 adds that students residing at the on-campus residences must bring no visitors in their residences, proceed wearing a mask, and be prepared to be evacuated to other rooms depending on the situation established (NWU, 2021).

University of South Africa (2020:10) articulated on the 17th of March in the year of 2020, it was communicated that “ all graduation ceremonies have been suspended until further notice, all shuttle services will be discontinued immediately, gatherings of more than 100 persons on all university premises are prohibited, including visits to the Art Gallery, students are strongly advised to study form home and are encouraged to submit their assignments online, all training sessions, especially of large groups, must stop immediately, all staff are directed to wear masks and gloves, all locals and international travel is banned and any students or member of staff who travelled internationally in the past three months is required to obtain and submit a medical certificate clearing such person of any infection of Covid-19 to the Executive Dean of the department in which such a person is involved in rendering a service”.

It is written in the policy that the community members of University of Pretoria are advised to abide by the Covid-19 regulations presented by the government from time to time (University of Pretoria, 2020). However, all Covid-19 lockdown regulations communiques from different South African universities are similar in response to Covid-19 pandemic but different pursuant to various services rendered.

University of Johannesburg (2020) responded to Covid-19 pandemic by converting some of the physical contact curriculum aspects by a combination of theory with practical work and implementing more of formative assessments than summative assessments. For instance, replacing exams with assignments and quizzes. Songca *et al.* (2021) mentioned that at the Walter Sisulu University during Covid-19 lockdown level 5, there is a need for remote learning, during level 4 there should be a pilot testing for online learning, on alert level 3 there should be availability of laptops and data for students then during level 2, preparations for 50% of returning students must be implemented and throughout level 1, 100% of students doing practical work return for physical contact learning while online learning proceeds. Hence, there is a blend of physical contact teaching and learning with online teaching and learning.

On the 23rd of November 2021, the Deputy Vice-Chancellor of Tshwane University of Technology wrote to the TUT community that students who have symptoms of Covid-19 should report immediately to the residence offices and lecturers and follow the TUT Covid-19 protocols daily (Tshwane University of Technology, 2021). In the policy of University of Cape Town (2020), it is written that “UCT will access up-to-date comprehensive evidence-based information about Covid-19 vaccines”. Misunderstood or false information about Covid-19 vaccines influence people to choose not to vaccinate (Germani & Biller-Andomo, 2020; Van der Linder *et al.*, 2020; Marco-Franco *et al.*, 2020). Therefore, it is evident that each university in South Africa responded to the Covid-19 lockdown regulations.

Information Communication Technologies are relevant to online teaching and learning since Suryani (2010) denoted that Information Communication Technologie (ICTs) are in education. ICTs were temporarily implemented for the continuity of education during Covid-19 (Ratheeswari, 2019). However, ICTs was used for distance learning courses before the introduction of Covid-19 (Bobb Peeraer & Van Petegem, 2012; Boloran, 2020; Korter & Olubusoye, 2014). Therefore, ICTs should be permanently used in pedagogies for easy adaptation and usability.

In a published conference proceeding by Semenya *et.al* (2022), found that majority of Bachelor of Indigenous Knowledge Systems students preferred online teaching and learning. Guerriero (2014) argued that “pedagogical content knowledge has more impact on student achievement than content knowledge”. However, since Covid-19 lockdown regulations are currently eased to level one, face-to-face teaching and learning is implemented back in 2022 academic year.

1.2 Rationale of the study

The researcher is aware of the fact that Covid-19 had an impact on all students in primary, secondary and tertiary institutions. Therefore, the researcher chose to focus on Bachelor of Indigenous Knowledge Systems students for various reasons. It is a primary requirement in Indigenous Knowledge Systems Centre to develop a research topic that relates to indigenous knowledge systems so the researcher could not phrase the research topic that diverges from indigenous knowledge systems. Secondly, the researcher was an undergraduate of Bachelor of Indigenous Knowledge Systems before and was affected by Covid-19. Therefore, the researcher understands what students were going through during the change of pedagogies caused by Covid-19 lockdown regulations.

In the previous study conducted by the researcher, the data revealed the relevance and importance of Information Communication Technologies (ICTs) in higher education (Semenya *et al.*, 2022). Regardless of the challenges that students faced with the use of ICTs on their studies during and before the experience of Covid-19, the education system should integrate pedagogies to allow students to enjoy the flexibility of teaching and learning. Okojie *et al.* (2006) indicated the problems related with the integration of technology in education.

This shows that the thoughts of using technology in higher education were in attendance but not put into action with the vision of securing flexible teaching and learning in the future. If the use of technology in higher education was implemented earlier as part of the education system, then during Covid-19 pandemic, education institutions could have not panicked but had the experience and knowledge continuing to use it. Covid-19 forced education institutions to transition the pedagogy from face-to-face to online which was declared as the new normal. The use of technology in higher education brought about more benefits which students and institutions must take advantage of (Hosseni & Kinnunen, 2021).

There is a need to compare teaching and learning experiences from Bachelor of Indigenous Knowledge Systems students in these two universities. For that reason, the researcher developed interest in exploring and comparing the impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students at North-West University and University of Venda.

The comparison of the findings will help universities to stress the idea of having a blend of pedagogies in the higher education systems conforming to the benefits of students with the use of Information Communication Technologies. Considering, the challenges they could face in an online environment while studying towards their Bachelor of Indigenous Knowledge Systems degree. Bachelor of Indigenous Knowledge Systems is offered in only these universities in South Africa.

Bhebhe (2023) supports the permanent use of online pedagogy in higher education to yield productive results. In the previous study, a majority of the participants indicated that they preferred online teaching and learning more than face-to-face teaching and learning. Thus, there is a need for the Bachelor of Indigenous Knowledge Systems to also be considered offered, also taking into consideration the needs and challenges of students with face-to-face pedagogy. Exploring the perspectives of Bachelor of Indigenous Knowledge Systems students at University of Venda will motivate both universities to start strategizing to offer Bachelor of Indigenous Knowledge Systems in an online pedagogy modality.

Studies about Information Communication Technologies have been done with regards to their importance in higher education environment (Dahiya, 2018; Balasubramanian *et al.*, 2009; Kozlova & Pikhart, 2021). In 2019, when Covid-19 pandemic started, researchers switched their interest to conduct studies about this phenomenon. This indicates that ICTs has played a role in higher education before the existence of Covid-19. Information Communication Technology (ICTs) plays a critical role in fostering teaching and learning under Covid-19 pandemic or any circumstance that stops face-to-face pedagogy from continuing (Shava, 2022; AI-Ansi, 2021).

Covid-19 did not bring about only bad experiences but also innovations in institutions of higher teaching and learning. Hence, the researcher decided to explore the challenges and prospects of using ICTs for online pedagogy. Students who are in their second, third and final year were the most affected by Covid-19 lockdown regulation changes in 2020 and 2021. The researcher noticed that first year students of 2022 academic year do not have the online pedagogical experiences influenced by Covid-19. Therefore, it was decided by the researcher to explore their perceptions

on the face-to-face teaching and learning under less constraints of Covid-19 lockdown regulations so to establish the reasons for either preferring online or face-to-face pedagogies.

There is an African proverb among Batswana that says “*ngwana o sa le leng o swela tharing*” (The child who does not cry, dies in the cradle) which means that people who do not speak up about their problems will not receive help (Haire & Matjila, 2008; Mamagoshi, 2015; Moduka, 2019). So, a Bachelor of Indigenous Knowledge Systems students will be given a chance to speak up about their experiences.

The challenges during remote teaching and learning and how it affected their studies so that they can receive support where necessary by university and staff. By comparing the results of the study, students will realize that they are not the only ones who suffered from their experiences. This will help them recover mentally and academically since they will learn from past teaching and learning experiences of other students studying Bachelor of Indigenous Knowledge Systems.

1.3 Problem statement

In an unpublished mini-dissertation by Semenya (2022), 90% of the participants agreed that they prefer online pedagogy more than face-to-face teaching and learning. Furthermore, the results proven that participants enjoyed the benefits of using ICTs for learning in their Bachelor of Indigenous Knowledge Systems degree in an online environment considering the experiences of poor network connectivity, load shedding of electricity, lack of access to indigenous knowledge systems custodians, shortages devices and data. Hence, the online pedagogy was temporarily implemented to ensure the continuity of teaching and learning.

Furthermore, since the programme was developed and implemented, it has never been carried out through online pedagogies as it is more focused on practical activities and face-to-face community engagements. Thus, the previous study results showed that participants found it difficult for them to have access to indigenous knowledge holders to complete their given assignments that required outdoor research activities under the pandemic so this research seeks for solutions to these kind of problems students are facing.

The researcher acknowledges that there are authors who have written about the impact of Covid-19 on higher education as their works are reviewed in the preliminary literature review section. This include, scholars such as Emmanuel (2020), Mukuna and Aloka (2020), Nyar (2021), Ndlovu (2020), Patrick *et al.*, (2021), Reddy *et al.*, (2020), Mpungose (2020), Hedding *et al.*, (2020),

Mhlanga and Moloji (2020) and Oyedotum (2020); nevertheless, there is no single author who has uncovered the impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students regardless of where the students study the course. Bachelor of Indigenous Knowledge Systems is still under developments and lacks study materials for Bachelor of Indigenous Knowledge Systems students to use for their academics. Hence, documenting this knowledge will add to the number of sources of information available.

The change of pedagogy from face-to-face to online by university happened without recognizing the needs of students. Even though, the university attempted to address some of the challenges faced by students while studying and being taught Bachelor of Indigenous Knowledge Systems in an online mode. Mpungose (2020) made a fair effort by investigating the transition of the method of teaching and learning from physical contact to the online modality and further states what is expected from inexperienced students to succeed in using Information Communication Technologies for remote teaching and learning.

However, there is still a need for further research based on the literature available. The method of teaching and learning changes from time to time when the Covid-19 lockdown regulations change. In agreement with the recent study conducted by the researcher, students find it difficult to adapt to online teaching and learning.

Nyar (2021) explored the challenges that first-year students face in the process of transitioning from physical contact classes to online classes but did not clearly state those challenges that students face under Covid-19 pandemic. Among all these scholars, there is no single author who explored the benefits of using online platforms for remote teaching and learning under the Covid-19 pandemic. Especially, with the Bachelor of Indigenous Knowledge Systems students at the University of Venda. Oyedotum (2020); Mhlanga and Moloji (2020) contributed that the challenges and benefits of transitioning to online teaching and learning according to the status of countries in the world such as in developed and developing countries. As a result, the findings are generalized.

Emmanuel (2020) points out that it is significant for parents to support students about their academics during Covid-19 pandemic but did not state in detail how parents should support their children studying in an online mode. In the research papers written by Mukuna and Aloka (2020); Ndlovu (2020), Patrick *et al.*, (2021) and Reddy *et al.*, (2020), there are no subjective personal

teaching and learning experiences of students studying different courses under the Covid19 lockdown or pandemic which upcoming students can learn from and expand their knowledge.

1.4 Justifications of the study

It is not easy to predict the end of the Covid-19 pandemic and even scientific research has found no prediction about it. Arashi *et al.*, (2021) argued that the decision of President Cyril Ramaphosa in containing the spread of Covid-19 by implementing lockdown regulations had a positive impact in the reduction of cases. Schroder *et al.*, (2021) indicated that Covid-19 lockdown regulations decline the spread of Covid-19.

Reddy *et al.*, (2021: 08) asserts that Covid-19 cases change rapidly and that influences the regulations to also change. As a result, the method of teaching and learning will change from physical contact to online and from online to physical depending on the situations of the adjustments of Covid-19 lockdown alert levels. Therefore, there is a need to ensure that Bachelor of Indigenous Knowledge Systems is offered in both face-to-face and online modes so that students can have their own preferences on which pedagogy works for them depending on their interests and needs.

Treve (2021: 214) wrote that “while many institutions have shifted to an emergency-based online system, it does not mean that they are prepared for an online pedagogy in the long run”. Universities, students and staff will always be affected by the changes in the Covid-19 lockdown regulation adjustments. Therefore, the documentation of their teaching and learning experiences will serve as a lesson for future students to adapt to online teaching and learning actively and successfully. In that case, online pedagogy will officially be a part of the permanent curriculum in higher education (Duraku & Hoxha, 2020; Mpungose, 2020). Indigenous Knowledge Systems strategies to online teaching and learning Bachelor of Indigenous Knowledge Systems under strict lockdown regulations are not explored.

Since Bachelor of Indigenous Knowledge Systems students prefer online pedagogy, the data will serve as a base for Indigenous Knowledge Systems Centre to develop online strategies to teach and learn it in a distance mode. The comparison of experiences of Bachelor of Indigenous Knowledge Systems students will serve as more information to establish suitable strategies for each university due to environmental diversity. Neeta (2021) acknowledges that universities found in various circumstances have their own different challenges brought by the Covid-19 pandemic.

1.5 Aim of the study

The aim of the study is to explore and compare the impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa.

1.6 Objectives

- a) To discover and compare the impact of Covid -19 on Bachelor of Indigenous Knowledge Systems students at North-West University and University of Venda.
- b) To explore and compare the challenges and prospects of using online platforms and Information Communication Technology for online teaching and learning in both universities.
- c) To identify and compare challenges and prospects of moving from online to face-to-face pedagogy under Covid -19 pandemic in both universities.

1.7 Research questions

- a) How did Covid-19 impact Bachelor of Indigenous Knowledge Systems students in University of Venda and North-West University?
- b) What are the challenges and prospects of using ICTs and online platforms in University of Venda and North-West University?
- c) What are the challenges and prospects of transitioning online to face-to-face pedagogy in University of Venda and North-West University?

1.8 Division of chapters

This chapter is divided into chapters which includes chapter 1 up to chapter 7.

Chapter one: Introduction, background of the study, rationale for the study, problem statement, justification for the study, aim and objectives of the study. This chapter also provides an outline of the research questions that were answered within the study.

Chapter two: Literature review. This chapter made available the definition of key concepts involved in the study and further provided the reviews of studies that were completed by different authors on the following topics, conceptual understanding of coronavirus, the impact of Covid-19 on higher education, challenges and benefits of online pedagogy in higher education before Covid-19, challenges of online pedagogy in higher education during Covid-19, Benefits of online

pedagogy in higher education during Covid-19, comparative studies on Covid-19 vs higher education, strategies used by lecturers and students in online pedagogy mitigation and adaptation, face-to-face classes in higher education before and during Covid-19 pandemic, recommendations to higher education for successful teaching and learning under Covid-19 pandemic, knowledge gap identified of which is one of the reasons why this study was carried out. Conceptual and theoretical frameworks were also covered in this chapter.

Chapter three: African philosophical underpinnings of the study are covered including African indigenous worldviews, ontology, epistemology, cosmology, methodology and axiology.

Chapter four: Methodology, study setting is covered together with the map of the location of the North-West University and University of Venda. Study paradigm including a table that explains the characteristics of interpretivism. Study design and approach, target population, sample size and procedures, data collection tools and methods, data analysis and ethical considerations of the study. Furthermore, the researcher explains how validly, reliability and trustworthiness of the study were ensured.

Chapter five: Findings from NWU and UNIVEN participants of which includes the following themes; reflection on participation in this study; demographic information of participants; the impact of Covid-19 on BIKS students; negative impact of Covid-19 on studies of participants; Covid-19 affected participants in the aspects of life; Positive impact of Covid-19 lockdown on BIKS students; Challenges faced by participants on the use of Information Communication Technologies (ICTs) for online learning; Benefits of using ICTs for online learning; Challenges of moving back to face-to-face pedagogy; Benefits of moving back to face-to-face pedagogy and discussion of these results.

Chapter six: A comparative analysis of the findings

Chapter seven: Limitations, conclusion and recommendations for the study.

Chapter 2:

Literature Review

2.1 Introduction

In this chapter, vital key concepts involved in this study are defined to show an understanding of the study. A conceptual understanding of coronavirus is provided similar to literature from scholars who conducted a research based on the impact of Covid-19 on higher education. These are reviewed to show questions that are unanswered by the authors who had done a study in this field. The comparative studies completed by researchers on the impact of Covid-19 on higher education are as well covered in this section. The review of the literature is vital for the researcher to identify the knowledge gaps and so to avoid repeating what other authors have studied about.

The challenges and benefits faced by higher education students in online pedagogy before Covid-19 as well as after and during the experiences of Covid-19 challenges and benefits are covered in this section. Furthermore, the researcher explored what other authors wrote about ICTs and the role that it played in higher education during Covid-19, the strategies used by students and lecturers to adapt to and mitigate Covid-19 and the recommendations made by researchers for the successful online pedagogy in higher education. Finally, introduction to ChatGPT and its role in higher education were discovered.

2.2 Definition of concepts

Covid-19: Covid-19 is a member of a large family of coronaviruses that causes infections on lungs and a difficulty to breathe called SARS-CoV-2 (WHO, 2020; Shereen *et al.*, 2020; Edridge *et al.*, 2020).

Cosmology: “it is the study of the universe, or cosmos, regarded as a whole” (Ryden, 2006: 01).

Pandemic: Grennan (2009) defined a pandemic as an outbreak of a disease that spreads to all parts of the world.

Lockdown: Piryani *et al.*, (2020: 150) stated that lockdown is a temporary period of emergency whereby people are not allowed to leave or enter a building or area freely.

Indigenous Knowledge: “Indigenous Knowledge is the unique knowledge confined to a particular culture or society” (Senanayake, 2006).

Indigenous Knowledge Systems: Indigenous Knowledge Systems is the skills, beliefs, and understandings developed by communities with long pasts of interaction with their natural lands (Tharakan, 2017; UNESCO, 2021; Bhuda, 2019:09; Ntuli, 2002; Hoppers, 2002).

Bachelor of Indigenous Knowledge Systems: Bachelor of Indigenous Knowledge Systems is a multi-disciplinary degree designed to equip students with essential skills, understanding, and values of Indigenous Knowledge Systems of which will enable them to advance their careers as experts in various contexts and fields (SAQA, 2009; Makoni, 2010; Pitamber, 2017).

Pedagogy: Cole (2019) points that pedagogy is the “methods and practices of teaching, especially in the academic subject”.

Face-to-face learning: Face-to-face learning is the process of teaching and learning that involves physical social interaction between the teacher and learner in education (Amanga & Biney, 2017; Arias *et al.*, 2018; Solak & Cakir, 2014; Acheamphong, 2011; Gherhes *et al.*, 2021).

Remote Learning: Collier *et al.*, (2013) and Blundell *et al.*, (2016) provided that remote learning is also called remote or online learning and it is conceptualized as the substitute of face-to-face to teaching and learning by using computers, smartphones, and other technological tools to acquire and share information.

Information Communication Technology: “technologies that provide access to information through telecommunication” (Ratheeswari, 2018).

ChatGPT- “is a conversational language model developed by OpenAI” (Sakib, 2023)

2.2 Conceptual understanding of Coronavirus

In a journal article by Paul *et al.* (2022), it is articulated despite the education distributed about Covid-19, people still believed that it did not exist. This is due to the myths about Covid-19 which spread across indigenous communities. Adbulla (2020) stated that “panic had occupied the world in a matter of a few weeks”. However, following the findings of the author, participants reported the stigma they had with regard to those who were in contact with the virus to avoid transmission (Paul *et al.*, 2022).

Mazucca *et al.* (2021) points that there are a lot of ideas coming from people around the world which comes in their thoughts about Covid-19 including death, masking up, and hospitalization. Therefore, the coronavirus can be conceptualized into different perspectives. In an African perspective, such diseases do not exist as they do not have ethnic names in different indigenous languages. Hence, they are regarded as foreign diseases since Covid-19 originated in foreign countries namely China and the United States of America. Media played a crucial role in distributing information about the symptoms, spread and preventive measures about coronavirus (Xu & Saltar, 2020).

A scientific understanding of Covid-19 is based on laboratory related research findings. Shin (2021) articulated that the coronavirus disease which was found in the year 2019 is triggered by an infection due to Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and demonstrates in numerous scientific forms, from deadly or mild infection to severe illness. Preventive measures to deal with Covid-19 were to use a sanitizer, wear a mask and avoid being in a crowded environment (Sun *et al.*, 2020). However, there are more effective measures such as vaccinating against the virus which indigenous peoples had perceptions about it. Lack of knowledge is dangerous since distribution of wrong information can have caused misunderstandings about the spread and cure of Covid-19 (Dean, 2020).

Centres for Disease Control and Prevention (CDC) published in 2020 confirmed that having difficulty in breathing, chest pain, changes in lip colour or nails and trouble to sleep or wake up were some of the symptoms of Covid-19. Castro *et al.* (2022) argues that fever, cough and headache are the signs of Covid-19. Vomiting and diarrhoea may be the symptoms of the coronavirus. Hence, other diseases show the same signs of the virus of which includes the influenza virus. However, some signs may be mild and invisible while a person is positively infected by the virus.

There is a difference between African indigenous health care systems and western Eurocentric health care systems. Sedupane (2023) alluded that African indigenous health care system focuses on five types of health care of which includes promotive, preventive, curative, rehabilitative and palliative. African indigenous health care system is a connection of these types of health care systems with the use of traditional ways of dealing with a disease, illness or ailment. For example, using traditional medicine such as *Lengana* among Basotho/Bapedi/Batswana/ Nguni speaking people to prevent or cure symptoms of Covid-19.

Lengana is scientifically called *Artenesia Afra* (Possa & Khotso, 2015). Traditional medicine was significant in dealing with Covid-19 pandemic (Bhuda & Marumo, 2021). While on the other hand, Western Eurocentric health care systems included the use of clinically tested medicine which was developed through experiments for a particular objective. Covid-19 was dealt with in both African and Western perspective in terms of the use of health care systems. World Health Organization (2021) supported the use of vaccines in the prevention and control of Covid-19 spread.

Lotfi (2020) denoted that Covid-19 spread and was transmitted from one person to another through contact of droplets of respiration via coughing, sneezing and talking. Hence, it was key to always wear a face mask that covers mouths and noses. However, touching surfaces that contained these droplets of respiration could put a person at risk of being contaminated with Covid-19. Thus, it was vital for people who tested positive or those who showed mild or serious signs of Covid-19 or flue to be quarantined (Guner *et al.*, 2020). Ndejjo *et al.* (2021) defined quarantine as the act of isolating oneself from the rest so as to prevent the spread of a specific disease that is infectious.

2.3 The role of pedagogy in higher education

Pedagogy plays a critical role in education and the right pedagogical method yield productive results in education. Pedagogy is understood and practiced traditionally or non-traditionally. Roberts (2011) mentioned that students preferred traditional pedagogy that involves practical experience which brought real-world solutions to problems. In non-traditional pedagogy, students do their work at their own pace and time while during the practice of traditional pedagogy, students do the work all at the same time. “Traditional teaching approaches are generally teacher directed, where students are taught in a manner that is conducive to sitting and listening” (Tularam, 2018: 129). Therefore, online pedagogy can be classified as non-traditional while face-to-face pedagogy can be classified as traditional.

Parasuram *et al.* (2014) wrote that traditional education is not effective more than non-traditional education since in traditional, learners rely on notes and textbooks of which lowers their critical thinking. For the learners to think independently and critically, the education system must integrate both online and face-to-face pedagogies for effective learning. Traditional pedagogy steals the opportunities of students to reach their full potential of creativity (Sobirova & Karimova, 2021). However, learning take place as the knowledge of the students is increased through reading and writing.

Entz (2007) states that teachers play a role in carrying out their experiences and knowledge to learners when learning take place and are responsible to share them according to how they think it is appropriate. “The power to develop innovative technology-supported pedagogy lies in the teacher’s interpretation of the newly learned technology’s value for supporting instruction and learning in the classroom” (Huhges, 2005: 277).

Technology growth is taking over the education environment due to the newly introduced Information Communication Technology devices and applications, instructors must be trained and be equipped with the knowledge and experiences to effectively carry out online pedagogy. With the level of advancing technology, learning become more flexible and productive with benefits such as saving travelling costs. Consequently, there are challenges and benefits of using a blend of pedagogies in higher education within different disciplines.

2.4 The impact of Covid-19 on higher education

There is evidence present in literature that shows that Covid-19 did not only affect higher education negatively but also positively as indicated by (Wang *et al.*, 2020; Yaseen & Joshi, 2021; Xhaferi & Xhaferi, 2020; Mahdy, 2020). However, Magomedov *et al.* (2020) did not indicate clearly the positive influence of the Covid-19 on education. Yaseen and Joshi (2021) indicated that students gained skills and knowledge on using technology.

Xhaferi and Xhaferi (2020) argued that that internet helped participants in accessing information. For example, learning how to use Zoom meetings and Google Meet to attend sessions, uploading files in these platforms and become more advanced with skills and knowledge (Yaseen & Joshi, 2021). Mukhtar *et al.* (2020) adds that students benefited from learning at their own time as this make them to be more active and independent.

Cranfield *et al.* (2021) explored and compared the perceptions of higher education students in Hungary, Wales and South Africa and further found that most students in South Africa agreed on having access to suitable devices for online teaching and learning than the abovementioned. El Said (2021: 06) discovered that internet connection was poor for students to write online exams and tests. Students’ performance was affected due to postponed examinations (Butnaru *et al.*, 2021).

Sa and Serpa (2020) pointed that the emergence of Covid-19 brought about the emergency changes in the education sector. Therefore, universities had to rapidly transition from physical contact teaching and learning to remote, training educators on how remote teaching had to be carried out

for students and ensuring that students have access to online resources at an affordable price because of Covid-19 pandemic (Rashid & Yadav, 2020; Farnell *et al.*, 2021). CDC (2021) mentioned that to prevent and contain the spread of Covid-19 in a public place, people should abide by Covid-19 lockdown restrictions such as social distancing, staying indoors and avoid being in a crowded space.

The shift of the pedagogy from physical contact classes to online classes aims to decrease the Covid-19 cases and deaths among students. For instance, using Information Communication Technology to attend online classes to avoid risks of being in contact with other students who may be Covid-19 positive without knowledge. Particularly, full-time enrolled students in different higher institutions did not successfully partake in online classes due to lack of resources during early days of the Covid-19 pandemic (Goldberg, 2021).

Khan (2021) found that the impact of Covid-19 on higher education revolved around the online learning, psychological impact of Covid-19 on remote learning, the remote transition to emergency virtual assessment (EVA), challenges of online learning, and creating collaborative cultures. Furthermore, in relation to remote learning challenges during the Covid-19 pandemic, some students were unable to use technological devices for their studies, the culture of digital learning was beneficial to students to interact with their peers and lecturers (Khan, 2021). “Schools adopted relevant technologies, prepared learning and staff resources, set systems and infrastructure, established new teaching protocols, and adjusted their curricula” (Barrot *et al.*, 2021).

As online teaching and learning sessions takes on longer hours using internet, students and staff experience difficulties to prioritize due to having responsibilities to take care of when at home such as taking care of children, family chores and other duties of which leads to bunking sessions (Pillay *et al.*, 2021; Bania & Banerjee, 2020). As a result, during physical contact teaching and learning, there is full participation and the focus on teaching and learning happens in a classroom during a specific period.

Blankenberger and Williams (2020) articulated that the number of students enrolling in colleges and universities in an online environment has dropped as compared to physical contact enrolment because of finance problems, lack of resources to study online and university decisions such as giving options to students to choose between taking a gap year or study online. Hence, physical contact classes were compulsory while online learning was urgently implemented to ensure continuity of education under Covid-19.

Salmi (2020) mentions that most of students around the world did not complete their studies successfully which led to failure while some finished their studies late due to the inability to complete tasks on time such as practical work, assignments and projects caused by lack of access to university resources, internet, and academic calendar changed due to the impact of Covid-19 pandemic on higher education (Strydom *et al.*, 2020; Marinoni *et al.*, 2020; Mahyoob, 2020).

The most affected students are those who come from local areas with poor family backgrounds (Gautam & Gautam, 2021). Bashir *et al.* (2021) found that 71% of participants had a quiet place to study while 33% were struggling to study under noisy, dark and poor temperature fluctuations environment. The study conducted by Semenya (2022) posits that students did not have proper study environment as one of the participants responded that she was diagnosed with the chronic pain disorder that was caused by sitting on dining room chair for a long time when studying and attending online sessions.

2.5 Challenges and benefits of online pedagogy in higher education before Covid-19

It is articulated by Gillet-Swan (2017) that software issues of Information Communication Technologies such as laptops and computers limit the flexibility of online classes. Furthermore, the access and use of online platforms was a challenge in online teaching and learning as they affect online classes. In this study, the methodology used to collect data used in the study is not clearly stated of which possess the issues of biasness of the knowledge.

Stone and Perumean-Chaney (2011) argue that online teaching and learning needs development of skills and knowledge on various technologies and students can are able to reflect on modules content developed through using Information Communication Technologies. Hence, it is a requirement at North-West University for students to learn in the ADLE module which deals with computer literacy and academic writing.

Graham (2019) found that teaching online is a difficulty in terms of expressions, gestures and body language as compared to face-to-face pedagogy. Furthermore, the lecturer responded that he was able to share study materials with students online (Graham, 2019). Arkorful and Abaidoo (2014) observed that it provides for diverse and huge amount of information accessed online, help form relationships among students and instructors, it is cost effective in terms of travelling costs, allows students to choose their preferences of how to study and reflect on what they studied, help improve the scarcity of academic staff and enable students to study at the time suitable for them.

Findings by Aljaraideh (2019) studied that online pedagogy is time consuming, students lack computer literacy and English skills and requires immediate feedback while on the other hand, students benefit from online pedagogy by developing skills and knowledge of using ICT. Moreover, time management is a challenge in an online environment to students, lack of knowledge and skills to use online platforms for online pedagogy, there are no regulations in terms of writing assessments such as cheating, misleading of piracy and plagiarism by copying and pasting information, causes crowding of the use of websites in search for information and also expensive payment for information (Arkorful & Abaidoo, 2014).

2.6 Challenges of online pedagogy in higher education during Covid-19

In the study conducted by Mbongo *et al.* (2021), poor network connectivity affected the attendance of students in online meetings. Mayoob (2020) found that 48% of students had difficulties with internet speed. The study used quantitative data collection method of which the researcher predicted challenges for students and formed a survey for them to rate them in compliance to how they were challenged by Covid-19 in an online environment. This method of data collection limits exploring the exact learning experiences of students since the researcher took into cognizance the challenges, they were facing instead of letting them to mention them.

Yusuf and Ahmad (2020) posit that students had no learning tools such as books and laptops, internet connectivity did not satisfy them and there was no attendance of online teaching and learning. Semenya (2022) further contributed to the debate that Bachelor of Indigenous Knowledge Systems students had a challenge of not accessing indigenous knowledge custodians to complete research assignments, poor network connectivity, lack of devices and data and distractions caused by not having a proper study environment.

Ramoroka (2021) presented “unavailability of GIS resources and infrastructure, unstable network connections, lack of access to digital updated geographical data, and limited or lack of ICT knowledge and skills in students” as the challenges encountered in online teaching and learning. However, scholars such as Muslikhah (2020), Mthethwa and Luthuli (2021), Ameen (2021), Makafane and Chere-Masopha (2021), Siddiquei and Kathpal (2021), Xhaferi and Xhaferi (2020), Alex (2022), Hassan (2021), Stecula and Wolniak (2022) and Mukhtar *et al.* (2020) mentioned similar challenges as mentioned by Ramoroka as evident on the themes found.

A lack of motivation in online pedagogy, isolation of students and staff are no longer interacting face-to-face, technical difficulties with regard to teaching and learning tools, access to resources

that are time consuming and unbalanced responsibilities between work and life (Arumugam *et al.*, 2021). Weldom *et al.* (2021) established that students had no access to internet connectivity, online classes recordings were not provided by some teachers, unfamiliarity of using online platforms by lecturers, slower response to questions due to waiting for the online lecturer to be done, lack of motivation to study due to not being physically interacting with peers and lecturers and too much work load at a very little time given to submit assignments.

Students benefited from saving money for travelling, flexibility of schedule and free time for other responsibilities, and ability to review lessons (Weldom *et al.*, 2021). Noori (2021) firstly collected quantitative data then qualitative data was later collected to explain the quantitative data. Students had challenges of shortage of electricity, lack of devices such as cell phone and inability to download study materials (Noori, 2021).

2.7 Benefits of online pedagogy in higher education during Covid-19

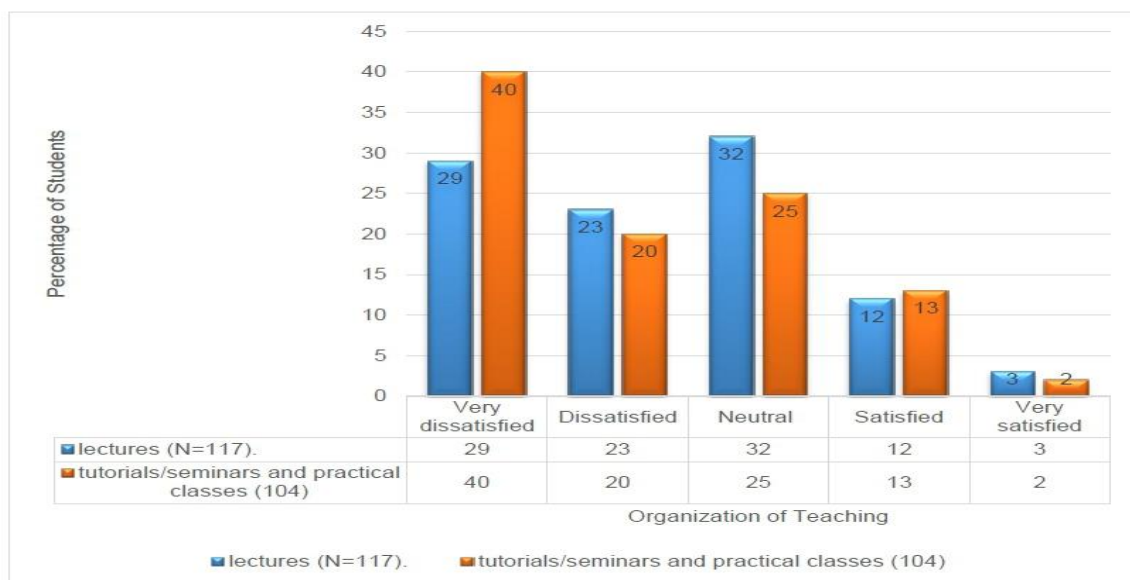


Figure 1: Student satisfaction with organization of lecturers and tutorials/seminars/practicals adopted from Alex (2022).

Alex (2022) found that 29 out of 117 students are satisfied with the organization of lecturers and tutorials including practical classes within their institution of higher learning. Mbongo *et al.* (2021) points that, lecturers found online teaching and learning flexible since they were able to record meetings with students in an online environment. The study was conducted using face-to-face interviews with 14 lecturers out of 65 lecturers (Mbongo *et al.*, 2021). Mukhtar *et al.* (2020) points

online learning is flexible and student-centred. Oyedotum (2020) mentioned that students and staff skills and knowledge about the use of online platforms were improved by working in an online mode. However, the benefits of online pedagogy differ following the study environments that students and staff find themselves living under.

Bailey and Lee (2020) did not clearly state the benefits of online pedagogy as they used quantitative method of data collection. Paudel (2021) found the perspectives of students regarding the challenges and benefits of online pedagogy with the use of survey questionnaires that are structured and unstructured. Yet, the methodology limited the researcher to get the primary knowledge of the participants since the researcher relied on the challenges and benefits when formulating questionnaires. However, scholars made fair contributions by outlining the benefits of online pedagogy such as access to online materials, learning at own pace and time, staying at home while studying, online communication, recording and sharing meetings records, good study environment (Alsayed & Althaqafi, 2022; Msengimana *et al.*, 2021).

Manea *et al.* (2021) clearly indicated that online teaching and learning saves time as there is free time since there is no travelling, one is comfortable at home and it saves money. Arifiati *et al.* (2020) suggests that online pedagogy made students more interactive with the lecturer than in the face-to-face setting since they were free to ask questions. The implementation of online pedagogy during Covid-19 reduced the spread of it (Stecula & Wolniak, 2022). Hence, there was no movements and face-to-face contacts with people who are infected without knowledge.

2.8 Comparative studies on Covid-19 vs higher education

Ever since Covid-19 started, scholars have developed interests on conducting comparative studies on the impact of Covid-19 on students, staff, curriculum and university activities. The comparative studies differ in line with making comparisons on environments, pedagogical changes, institutions, staff and students with regard to the impact of Covid-19 on these abovementioned. Ahrens *et al.* (2021) completed an empirical study that compares the students' views on the impact of Covid-19 on higher digital education. Asher (2021) gathered data from United States and Pakistan higher education institutions to compare their relationship with Covid-19, face-to-face learning and online learning.

Both scholars in these different papers discovered the problems of students regarding online learning since he found that student experience computer related issues such as software and hardware and network connectivity due to high connected number of people at one time, lack of

preparedness and skills to use technological devices. Hence, it must be a requirement for higher education institutions to make online teaching and learning a permanent pedagogy in the curriculum so that students and staff can adapt easily and successfully to pedagogical changes.

Elberkawi *et al.* (2022) researched about a comparative study on challenges and difficulties faced by student instructors and students with online learning during Covid-19 pandemic using a mixed method approach to collect data. Furthermore, the study found similar challenges experienced by student instructors and students regarding access to power and preference of face-to-face pedagogy since they can both interact, teach and learn successfully without obstacles (Elberkawi *et al.*, 2022). Dawanti *et al.* (2022) conducted a comparative study on the implementation of online learning in response to Covid-19 pandemic using quantitative data collection method and the study found that 39.2% students and 40% lecturers responded that online learning was pleasant.

Djita *et al.* (2020) showed a comparative study on the impact of the Covid-19 pandemic on the first-generation, low income and rural students in Indonesia and Vietnam cross culturally. Furthermore, it was revealed that college students in Vietnam and Indonesia differ in various aspects since they study in various environments with diverse education policies (Djita *et al.*, 2020). Cranfield *et al.* (2021) found that more students in Hungary agree to work independently in an online environment as they had access to Information Communication Technology with improved usability and less internet connectivity problems more than in students from South Africa and Wales.

Similarly, Khadobandelou *et al.* (2020) conducted a comparative study of an Iranian, Omani and Malaysian universities on Covid-19 and online behaviours in higher education. Kaqinari *et al.* (2021) completed a comparative study on four European universities with regard to switching to online teaching during the first Covid-19 lockdown. Casalone *et al.* (2021) completed a comparative study between Sweden, Italy and Turkey students on the effect of lockdown to their performance. These papers state the effectiveness of technology in online teaching and learning during Covid-19 pandemic. However, the challenges that the universities faced during the lockdown periods differ in accordance with the advancement of technology and status of the nation in terms of economic power.

Ali *et al.* (2023) speculates by comparing the impact of online and blended learning in higher education. As indicated by Ali, Khan and Alouraini, blended learning yields more productive results of students than a single pedagogy. Investigations into 6 schools to compare delivery

modalities in higher education during online learning influenced by Covid-19 showed that students in these schools preferred remote learning than face-to-face (Rodriguez-Hernandez & Rincon-Flores, 2023). As much as the use of technology poses challenges to students, institutions, and staffs, it is relevant to effective teaching and learning and beneficial.

2.9. Strategies used by lecturers and students in online pedagogy mitigation and adaptation

There are challenges faced by students and staff in an online environment. These challenges include a lack of knowledge and skills to use technology, lack of devices and data, poor network connectivity, lack of support from university, staff and parents or guardian to students, lack of electricity power and low attendance (Gurung, 2021; Akram *et al.*, 2021). Therefore, teachers or lecturers and students or learners have developed strategies on how to cope with online teaching and learning under Covid-19 pandemic.

Nasri *et al.* (2021:549) claims that training and technical support was given to lecturers by the ICT help desk team. Students were prepared for the alterations of pedagogy from face-to-face to online. Hence, the universities offered students free data and Wi-Fi connectivity (Simon, 2012; Kebritchi *et al.*, 2017; Rapanta *et al.*, 2020). As online pedagogy was not a new part of the higher education curriculum, higher education should be more technologically advanced than the past few years. For instance, North-West University gave students who did not have devices laptops, were the ones who were given bursaries.

Mazlan *et al.* (2021) stated that lecturers should constantly give feedback to students so to motivate them to be actively engaged in online teaching and learning. Ramoroka (2021) presented that universities must update their software of which are technologically required for online teaching and learning. For instance, North-West University students acquire knowledge and skills from modules that students learn such as ADLE 122 of which is a computer literacy module that equips students with computer skills and knowledge.

2.10 Face-to-face classes in higher education before and during Covid-19 pandemic

Before the Covid-19 pandemic was experienced across the world, education physical education was compulsory as a pedagogy. Varea *et al.* (2022: 32) concluded that pre-service teachers were not familiar with the way physical education changed. The curriculum of physical contact education was formal and strict since students were writing exams, attending in-person classes and meeting with their lecturers for consultations in his or her office.

Jandric and Cruatia (2020) suggests commented that in an online environment includes of a series of assignments. But then again, “teachers are actively collaborating with one another at a local level to improve physical education teaching methods (Pokhrel & Chhetri, 2021: 138). However, due to the Covid-19 lockdown restrictions such as social distance maintenance between students became a reality and less portion of students required within a single building, there is less communication and interaction between students and teachers.

Masurier and Corbin (2006: 45) argues that during physical education, the limited hours for teaching and learning take place for less than ten hours. As a result of Covid-19 pandemic, there are limited hours given for physical education to take place. Physical contact teaching and learning took place at home and facilitated by parents (Barwais, 2020; Roe *et al.*, 2021). Varea and Gonzalez- Calvo (2021: 831) mention that physical education continued in the presence of Covid-19 with strict conditions. The conditions include social distancing, wearing masks, and limited number of learners and teachers in the institution of education.

It is not a secret that physical contact classes either had to be blended with online classes or permanently be substituted using online platforms during Covid-19 pandemic. Valera *et al.* (2022) cited that “the emergence of Covid-19 has meant innumerable changes in the education arena”. Hence, before Covid-19 was established, many universities had courses that were studied by students using distance learning while on the other hand physical contact classes were implemented in many of the courses. De Pietro *et al.* (2020: 09) elaborated that, students were physically interacting with each other effectively. Therefore, during Covid-19 lockdown, students had to learn new social skills for communication since classroom activities were cancelled. As the closure of schools affected students and teachers in the entire world (Dakaru & Hoxha, 2020; Dunto & Wang, 2020).

2.11 Recommendations to higher education for successful teaching and learning under Covid-19

Akintolu *et al.* (2021) argues girl child education can be improved by developing and providing online study materials and devices. Information Communication Technologies play a critical role in carrying out online teaching and learning. Training must be provided to enhance the knowledge and skills of students and staff about the use of technology for online teaching and learning (Toquero, 2020; du Plessis *et al.*, 2022).

Ali (2020) recommended that staff needs Information Communication Technology tools and ability to use them successfully for teaching and learning. Semanya (2022) made fair recommendation at 19th Oral History of South Africa Conference 2022 that that since majority of students feel comfortable with online teaching and learning, universities must consider arranging online and physical contact teaching and learning as choices that students can make regarding how they want to learn their respective courses for any academic year. Khoza *et al.* (2021: 126) suggested that the adoption of online teaching and learning should proceed in all higher education sectors even after the pandemic.

Since, Covid-19 will be experienced in a long run, quality research on the impact of Covid-19 on higher education must be conducted to improve solutions to problems in the future (Karakotse, 2021: 10). While students experience anxiety and stressful circumstances brought by Covid-19 pandemic affecting their academics, universities should continue to offer support to students in need (Nyar, 2021: 89). Students living in rural areas had problems with electricity load-shedding and poor network connectivity. Therefore, governments and universities should collaborate with network providers to improve network connectivity in rural areas (Landa *et al.*, 2021: 180).

Ntombela (2022) concluded that while various institutions deal with challenges that students and staff have regarding online pedagogy, they also need to consider the needs of students and staff with disabilities so that teaching and learning continues both sides. The foundation of support to students and learners must come from parents then teachers will lead the process of teaching and learning so that there is collaboration to combat the challenges brought by Covid-19 pandemic on online and physical contact teaching and learning (Di Pietro *et al.*, 2020: 35).

2.12 ChatGPT

There has been intense interest on ChatGPT ever since it was released in different parts of the world. Sakib (2023) guided that ChatGPT is a conversational language model that was introduced in 2015 by Sam Altman, Ilya Sutskever, Jon Schulman, Musk Elon, Wojcieh Zaremba and Greg Brockman. It was then released to can be used in 2022. Therefore, this language model can generate information through prompting each word as it is fed with data from the internet (Haque, 2023). However, it cannot generate its own data to give a response beyond its capability.

ChatGPT can be used for many things depending on the subject it is directed to bring solutions or ideas for. In education, it can be used for coding, assistance with writing poetry, assignments,

summarising text, mathematical solutions and science related subjects (Shahriar & Hayawi, 2023). However, it only generates information that is available and familiar with.

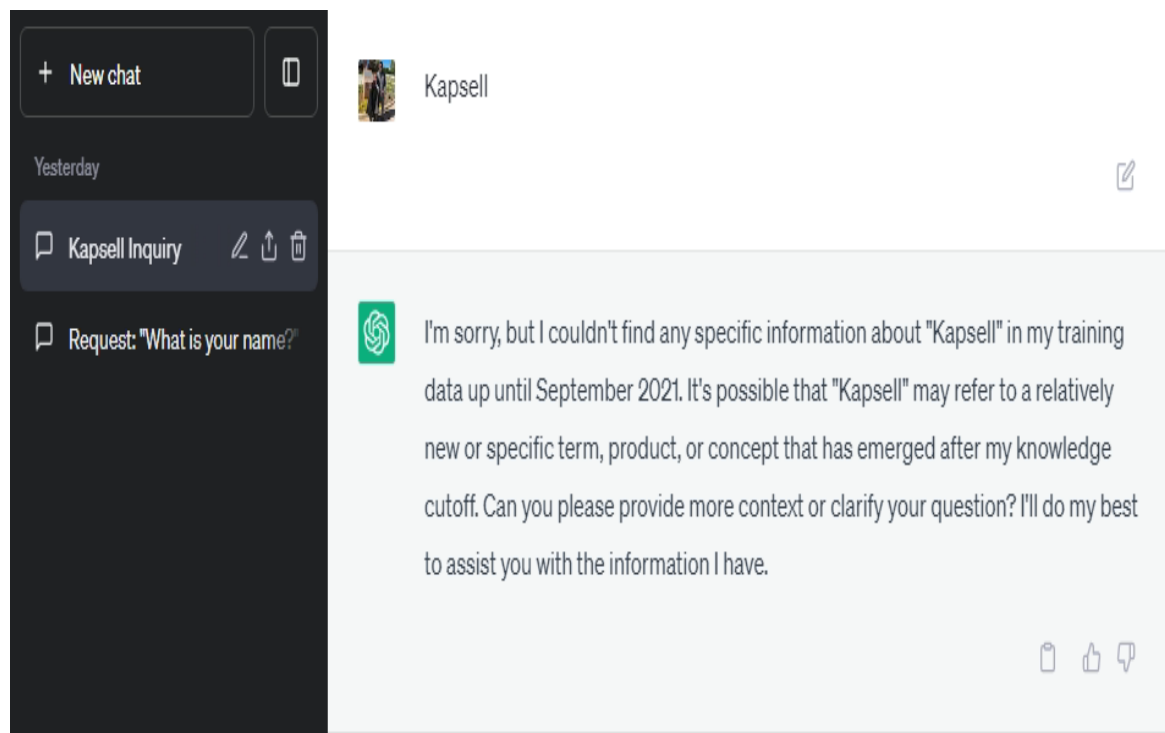


Figure 2: Screenshot of a ChatGPT response taken by Kapsell Kwena Semanya, 2023

In figure 2 above, the researcher asked ChatGPT to explain the name “Kapsell” as it is name that is unpopular and it responded with the text shown on that figure. Therefore, this serve as proof that ChatGPT is not a reliable source of information as it has limited information to provide. Therefore, it is imperative for learners and students to use ChatGPT in an ethical manner with a conscience of not being fully depending on it. However, in figure 3 below, the researcher asked ChatGPT a question that is popular and familiar with and it was able to provide data for the question.

In the figure below, the researcher sent an enquiry to ChatGPT by asking it what indigenous knowledge systems is and it responded by defining the concept that is farmiliar with the concept. Therefore, these two varying enquiries proves the strengths and limitations of using ChatGPT in higher education. This technology cannot generate information that it is not farmiliar with it as it relies on prompting word by word to generate information that serve as a answer to a given instruction (Zhai, 2023) .

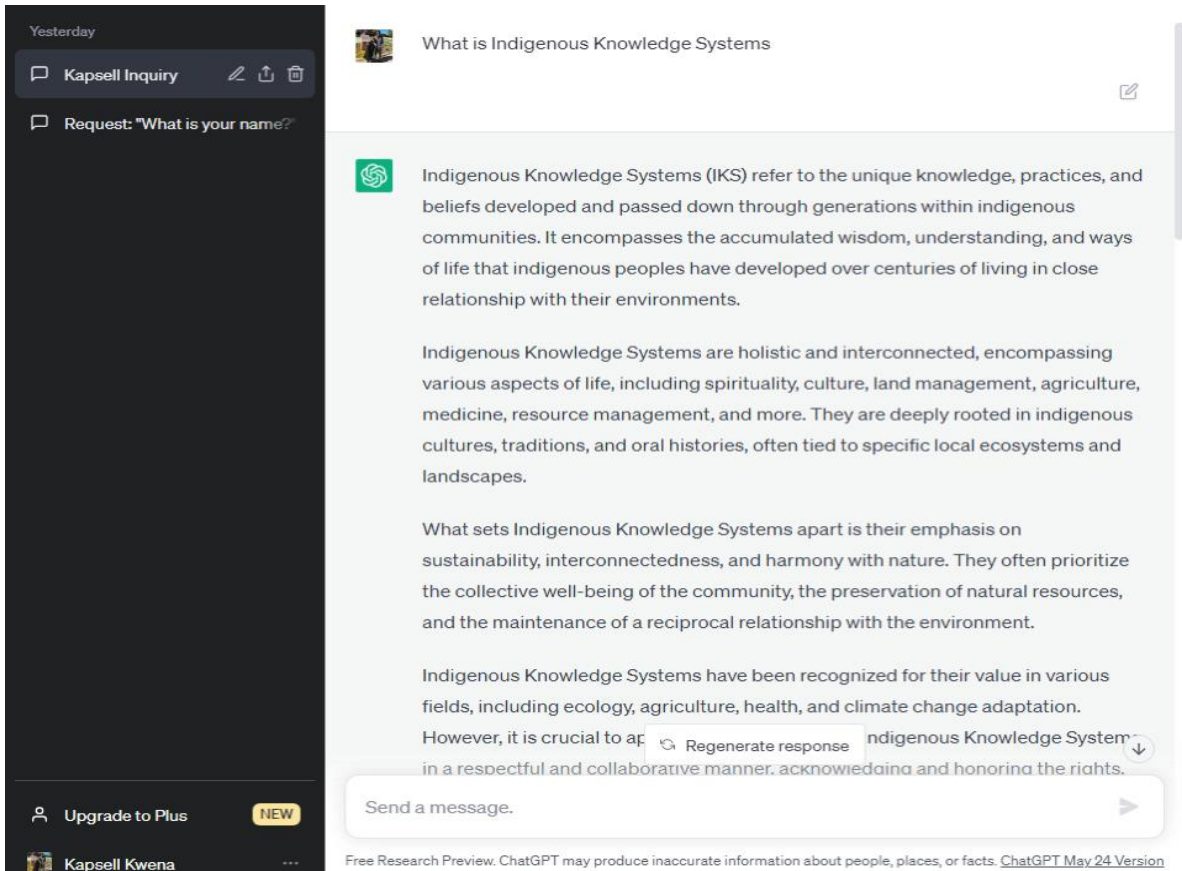


Figure 3: A Screenshot of a ChatGPT response (Screenshot taken by Kapsell Kwena Semanya, 2023)

2.13. The role of ChatGPT in higher education

The everchanging advancement of technology continues to take place across the world. Hence, the education system adopted the use of varying technological products and services. There is a crucial role that technology play in higher education as much as it has advantages and limitations (The Centre for Learning, Teaching, and Development, 2023). University of Pretoria (2023) points that ChatGPT can improve teaching by assisting lecturers to create lesson plans, writing outcomes of tasks, development of worksheets, creating PowerPoint slides, improvement of learning to students and identification of enamours ideas related to the course. In a nutshell, there are plenty of solutions that ChatGPT can provide for higher education.

ChatGPT is relevant to any study field in higher education depending on how it is used, and it accommodates students with disabilities. In Data Science, it has strengths of being flexible, user-friendly and competitive in terms of performance (Hassani & Silva, 2023). In a review by Kwan

Li (2023), ChatGPT makes the research journey easier by providing either relevant or irrelevant information and assists students and staff to study as it can adapt to their needs. Cribben and Zeinali (2023) argues that it develops new skills for educators and students such as communication, language and computer skills and improves learning by providing hybrid learning support. However, limitations of ChatGPT have a negative impact on learning experiences of students and staff in higher education.

Limitations of ChatGPT have a symbiotic relationship with the ethical implications of using this technology in higher education. ChatGPT relies on information that it was informed with. Hence, it is difficult for it to regurgitate relevant information for the specific topic that it is not aware of. There are issues of language barrier in terms of searching for information using a specific ethnic language that it does not have data about (Hong, 2023). For example, the use of the Khoi-San language to search for information. There should be more developments in terms of increasing the language translation options that accommodates every language existing across the world.

There can be potential bias of the information that it provides which may result in misleading answers to questions (Adiguzel *et al.* 2023). Misunderstanding the ethical use of artificial intelligence and ChatGPT compromises the academic integrity that universities vouch to keep among students and staff. The code of conduct for students indicates the unlawful uses of information without acknowledgement of the source (North-West University, 2021).

Neumann *et al.* (2023) mentioned that the use of ChatGPT in higher education by students is not yet acceptable because of the ethical and integrity issues that come along with it. Higher education institutions have not yet established ethical ways of using ChatGPT which corresponds with academic integrity policies. Maintenance of academic integrity is a challenge when using ChatGPT on academics (Rasul *et al.*, 2023). However, students continue to use ChatGPT in their studies, regardless of its limitations and implications.

Kitazawa (2023) articulated that the danger of using advanced technology in academics includes the issues of plagiarism, decreased critical thinking and writing skills since the technology give away answers to questions as users may copy and paste information as it is. Lee (2023) argues that ChatGPT may causes more chances of cheating when writing academic tasks. However, there are ways in which education institutions can develop to regulate the use of ChatGPT in the education system. These includes, thorough training offered to students and staff regarding ethical use of this

technology on their academics (United Nations Educational, Scientific, and Culture Organization, 2023).

2.14. Knowledge gap identified

Based on the literature reviewed, there is no single researcher who has completed an explorative or comparative study on the impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students. Hence, students studying various courses under diverse faculties have their unique challenges and benefits of using Information Communication Technology for online learning. These experiences need to be explored and documented for academic and personal use by other students for their own academic and personal developments.

Zawaideh *et al.* (2018), it is vital to document knowledge for future access and use in a time of need. However, the researcher explored the impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students at the North-West University, Mahikeng Campus for the completion of Bachelor of Indigenous Knowledge Systems. Lack of knowledge about the impact of Covid-19 pandemic on Bachelor of Indigenous Knowledge Systems students will raise issues of implementation of pedagogy that is not favourable and more effective to the performance of students and staff as they are the most affected.

Semenya (2023) presented a systematic review of literature paper at 20th Annual National Oral History Conference after reviewing that higher education students preferred online pedagogy more than face-to-face pedagogy due to enjoying the benefits of it while it lasted. Hence, there is a need for universities to consider making online pedagogy a permanent pedagogy in the curriculum. “Conducting effective distance education in the background of inexperience and immediate need is a real challenge” (Rafi *et al.*, 2020). There are challenges that students are facing in an online environment (Misirli & Ergulec, 2021).

In the previous study completed by the researcher, participants indicated the challenges faced in the presence of Covid-19 pandemic during online pedagogy. Therefore, the researcher intends to explore the challenges faced by University of Venda bachelor of indigenous knowledge systems students and compare their challenges with those that North-West University students faced so to have a broad information and solutions.

North-West University and University of Venda are in different locations, and it is evident that the researcher will find varying information about the impact of Covid-19 pandemic for possible

solutions to future problems faced by students in these universities. The two different departmental centres will learn from one another through the experiences of Bachelor of Indigenous Knowledge Systems based on the strategies that needs to be implemented in the future pandemics for a feasible pedagogy.

Hardships faced by students are not experienced during Covid-19 pandemic alone, they existed before the pandemic. As indicated by scholars such as Musingafi *et al.* (2015), Gillett-Swan (2017), Wang (2014), Mathew and Iloanya (2016), Gilbert (2015), Simon (2015), Kebritchi *et al.* (2017) and others, students faced various challenges related to lack of content, inadequate skills, and knowledge to use of technology, adaptation and communication difficulties in an online mode, lack of support from university, family and staff and lack of devices. Therefore, these challenges are identical to the experiences of students with regard to online pedagogy in the presence of Covid-19 pandemic.

There is still a need for more skills and knowledge development programmes that helps students and staff to cope with their academic challenges regarding using Information Communication Technology for online pedagogy. The identified programmes such as academic advising, supplementary instruction, tutoring, academic peer mentoring, *efundi* support and reading development have contributed to the academic success of the North-West University's Bachelor of Indigenous Knowledge Systems students. Therefore, the researcher desires to establish the support system provided by the University of Venda in the present and past pertaining Covid-19 pandemic. The effectiveness of these programmes will be judged by participants as per their participation and benefits they get from them.

Online learning implemented during Covid-19 pandemic had benefited students in various ways pursuant to their level of study and circumstances they were living under. Furthermore, due to online learning existence as part of the university pedagogical approaches to education, there is a combination of face-to-face and online learning approaches to education which is called hybrid learning. This model of education was introduced recently and North-West University is in a quest to pilot the model on selected courses. Therefore, it is important for higher learning institutions to consider challenges faced by students and lecturers during online learning so that hybrid learning can occur successfully.

2.15 Conceptual Framework

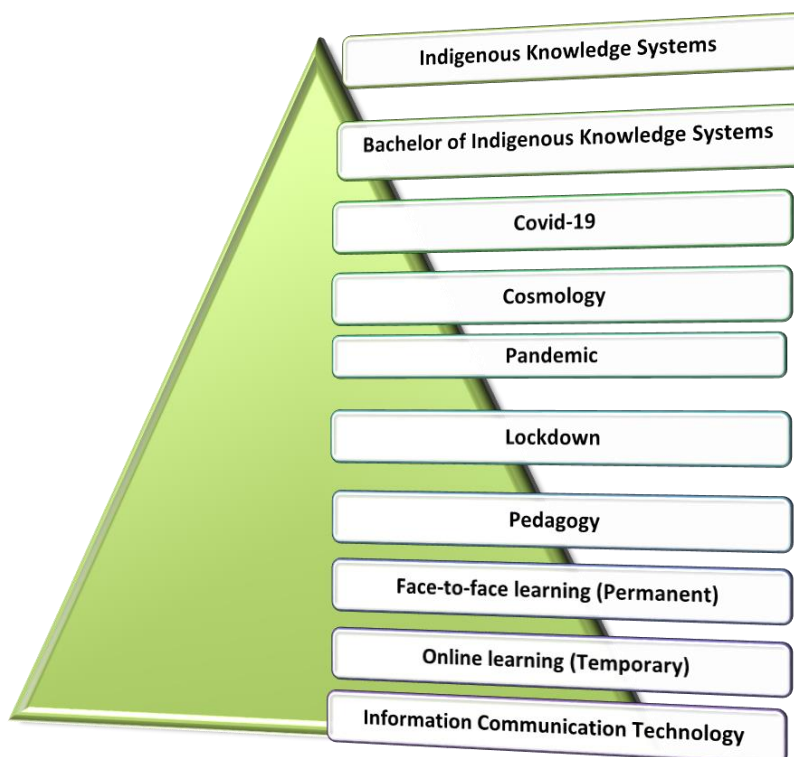


Figure 4: Diagram of the conceptual framework by Kapsell Kwena Semanya in 2022

Indigenous Knowledge Systems are skills and technologies developed by a certain community existing on a specific geographical land for survival (Muyambo, 2018; Ndangwa, 2007; Onwu & Mosimege, 2004). It was cited in Hoppers (2002: 08), that “indigenous Knowledge Systems refers to the combination of knowledge systems encompassing technology, social, economic and philosophical learning, or educational, legal and governance systems”. Indigenous Knowledge Systems are passed down from one generation to the next through indigenous education, cultural practices, and word of mouth (Maferetlhane, 2012; Bereda, 2015; Atoma, 2011).

Kaya and Seleti (2013: 35) points that African indigenous knowledge systems lack universal use due to being localized and community-based nature. The relevance of Indigenous Knowledge Systems to sustainable development and that it is in danger of becoming extinct put governments and education institutions under pressure of documenting, protecting, and promoting it (Ngulube et al., 2015; Breidlid, 2009; Ayaa & Waswa, 2016; Tanyanyiwa & Chikwangha, 2011). Hence, Indigenous Knowledge Systems is disappearing because of the deaths of indigenous knowledge

custodians (Lalonde, 1991; Makhura. 2004; Mapira & Mazambara, 2013; Masekoameng & Molotja, 2019).

North-West University and University of Venda developed a programme called Bachelor of Indigenous Knowledge Systems to claim the indigenous knowledge systems left before it disappears for good. Before Covid-19 was established in South Africa, the method of teaching and learning was through face-to-face. Since Covid-19 was regarded as a pandemic by the World Health Organization, the President of South Africa responded to the pandemic by taking the country into a national lockdown due the growing number of cases and deaths (Costa, 2020; Ebrahim, 2020; Zhang & Ma, 2020). However, there are cosmological assumptions and perspectives at Western and indigenous communities have on the nature and causes of Covid-19.

In the African context, among the Batswana, Covid-19 is called *Mogare wa Corona* while the Nguni –speaking people says it is *Isifo* which translated to ‘virus’ (Department of Health, 2020). Lone and Ahmad (2020) highlights that aetiology of Covid-19 held by Africans is that it started in international countries such as Wuhan City and United States of America and started to spread across the world and it is known to have been caused by bats. Therefore, there are different perceptions that the researcher wishes to explore regarding Covid-19.

Universities had to close while students and lecturers had to stay at their homes. However, North-West University altered the pedagogy from face-to-face to online teaching and learning in 2020 and 2021. Physical contact teaching and learning had come to an end due to the Covid-19 pandemic (Zalat *et al.*, 2021) Thus, students had to use Information Communication technology for online teaching and learning. However, some students did not have access to devices and data while others were challenged by poor network connectivity and load shedding.

In 2022 academic year, face-to-face teaching and learning is implemented back as it is permanently part of the curriculum while online teaching and learning was temporarily applied to have a continuous teaching and learning under Covid-19 pandemic. Since, under Covid-19 lockdown level five, students, community knowledge holders and lecturers had a difficulty of not being able to engage face-to-face. Consequently, community engagement was interrupted since Bachelor of Indigenous Knowledge Systems students rely on it for the completion of their academic tasks such as assignments and research projects. Community engagement “is a set of

practices that helps researchers establish and maintain relationships with the stakeholders to a research program” (King *et al.*, 2014).

2.16 Theoretical framework

The study by Grant and Osanloo (2014) denotes that, theories give the dissertation philosophical, epistemological, methodological and analytical tactic. There are various theories that can be used in this study, but the researcher chose to utilize the above theories as they are more relevant to the aim and objectives of the study. The researcher utilized five theories to give the study a theoretical base. These theories include Indigenous Theories of Contagious Diseases, Cultural discontinuity theory, Constructivist learning theory and Ubuntu as the African moral theory and Information Richness Theory/Media Richness Theory (IRT/MRT).

(a) Indigenous Theories of Contagious Diseases

Good (2007) mention that Indigenous Theories of Contagious Diseases was founded by Edward C. Green in 1999. Among the Bono who are Akan people found in central Ghana, they understood diseases their own unique ways. “These illnesses are classified, As claimed by Warren, into large groups, naturally caused *mogya mu yadee* and spiritually caused *sassum mu yadee* (Kendall, 2008). For instance, among the Bapedi communities, *Makgoma* is a spiritually caused disease that affects a person who had a sexual intercourse with a widow and it can lead to death if not treated (Mathibela *et al.*, 2018). While on the other hand, naturally caused diseases are called *Malwetsi a tlhago*.

Green (1999) argues that this theory was used to differentiate various diseases that exist in the previous generation, their observed cause and effect relationships. In the African context, diseases affect the physical and spiritual wellbeing of people while on the other hand, in the western perspective, diseases affect only the physical wellbeing of a person (Kriel & Mapogole, 1998). *Badimo or Amadlozi* who are ancestral spirits cause diseases to get the attention of their relatives who still exist in the physical world. However, there are diseases that are caused by evil spirits of which causes physical harm. Hence, African people use *muthi* to protect themselves from evil spirits (Mamaube, 2018).

In this study, Covid-19 is a highly contagious disease of which affected indigenous people in Africa and across the globe. Therefore, the researcher is using the theory to understand the etymology of Covid-19 by participants during focus group interviews. The theory was helpful

in the data collection process as the development of questions is influenced by this theory since the researcher intends to unpack the worldviews of participants regarding Covid-19. Available literature is more focused on the Western understanding of Covid-19.

The theory shaped the understanding of different perceptions about Covid-19 with regard to its cause, existence, myths and truths about it and how it affected relationships and teaching and learning. The researcher used the theory to explore its cause and effect based on experiences and understandings of participants as they are indigenous peoples of Africa.

(b) Cultural discontinuity theory

Cultural discontinuity hypothesis was presented by an anthropologist John U. Ogbu in 1982 in the quest to understand the causes of failure by students who study at public schools. He found that the cause of failure was discontinuity of culturally specific behaviours that are home-based in the school environment. For instance, the use of local language in the classroom as the language of teaching and learning being replaced by English.

There are other anthropologists who attempted to unpack the theory such as Franz Boas and Malinowski Bronislaw (Huffman, 2001). Tyler *et al.* (2008) defined the cultural discontinuity theory as a theory that seeks to assess the school-based behavioural processes where the learning preferences and practices based on culture of ethnic students originating from home are neglected at school.

“The discontinuity between home and school-based behavioural expressions of ethnic minority students has been conceptually linked to their academic difficulties” (Tyler *et al.*, 2008). Kirsti (1998) acknowledges the importance of culture in education as it shapes thoughts, actions and the understanding of teaching and learning. The culture of the university shifted from face-to-face pedagogy to online using ICTs which the theory assisted in understanding the experiences faced by participants in those adjustments of pedagogies.

The researcher chose this theory because students who study Bachelor of Indigenous Knowledge Systems are from varying cultures. Therefore, it is important to understand their cultural background and how it influences their learning experiences about Covid-19 pandemic and pedagogical changes. For example, the researcher will allow participants to communicate with the use of their local languages during *Lekgotla* focus group interviews so that they are all comfortable and free to share their experiences.

Participants originate from varying ethnic groups such as Batswana, Bapedi, Basotho, AmaXhosa, AmaZulu, Amandebele, Coloureds and the Vendas. The move of allowing participants to use their home languages in response to the interview questions was effective because they were all accommodated. Participants had fair chances to express their ideas and shared their knowledge and experiences with regard to how Covid-19 affected their studies and benefits they received from the changes of pedagogy.

(c) Constructivist Learning Theory

For the researcher to understand the teaching and learning experiences of participants who are Bachelor of Indigenous Knowledge Systems students, constructivist learning theory had to be implemented to underpin the study and help base and shape their understanding. Olusegum (2015) understood constructivism as the theory of how people learn in terms of observing and through scientific experiments. Jean Piaget is the father of the Constructivism theory presented between the years of 1896 to 1980 (Liu & Matthews, 2005). However, there are other constructivists who contributed to the existence of the theory such as Lev Semyonovich Vygotsky, John Dewey and Jerome Seymour Bruner (Obi *et al.*, 2019).

Jia (2010) said that the theory says that learners construct their own knowledge through their experiences and interactions with new challenges. As a result, the researcher used the theory to further uncover the knowledge that participants developed through the interaction with the constant change of pedagogy from online to face-to-face vice-versa. This is theory assisted the researcher to uncover the objectives of the study.

Piaget (1973) wrote on ‘to understand is to invent’ that knowledge is experiential or inherited from birth in terms of his theory of constructivism. Hence, this theory was relevant to contribute in uncovering the challenges and benefits of using online platforms for online pedagogy and alterations of pedagogy based on the experiences of participants. Hein (1991) alludes that in constructivist theory, language is key for the learning process. In this case, the researcher was aware that participants are from various cultural backgrounds considering their language differences. Therefore, all participants were allowed to share their experiences using their own local languages.

d) Ubuntu

The researcher acknowledges the difference between a theory and philosophy. Therefore, decided to use Ubuntu philosophy as a moral theory in the research. Van Breda (2019) posits that Ubuntu principles can be used in social work as it informs ethics and sustainable development. “Ubuntu Philosophy was the foundation of the Moral Regeneration Movement that was launched in South Africa in 2002” (Eliastam, 2015). Christian Gade wrote about Ubuntu philosophy in 1846 and published with Aarhus University (Thompson, 2020).

Odari (2020) argues that Ubuntu philosophy has been there since in the year of 1850. Bolden (2014) found that Ubuntu is a Zulu or Xhosa term that means ‘humanity’ and when translated is called ‘I am because you are’ of which in Zulu, they say ‘*umunu ngumuntu ngabantu*’. In (ChiShona) they say ‘*Munhu munhu navanhu*’ (Mbiti, 1969). Ubuntu philosophy was used by Archbishop Desmond Tutu in theology and Nelson Rolihlahla Mandela in politics (Mungubate & Myanguru, 2013: 83). Ubuntu philosophy in this study is used as a moral theory to carry out a successful data collection process.

There are many terms for *Ubuntu* as denoted by (Schreiber & Tomm-Bonde, 2015). Among the Bapedi society, Ubuntu is called *Botho* and in Sepedi, it is said that ‘*motho ke motho ka batho*’. In Zimbabwe, *Botho* is called *Unhu/Hunhu* (Hapanyengwi & Shizha, 2013; Viriri, 2017). As specified by Chikoko and raparanganda (2020:69), “in Angola, it is known as *gimuntu*, Botswana (*muthu*), Burkina Faso (*maaya*), Burundi (*ubuntu*), Cameroon (*bato*), Congo (*bantu*), Congo Democratic Republic (*bomoto/bantu*), Cote d’Ivoire (*maaya*), Equitorial Guinea (*maaya*), Guinea (*maaya*), Gambia (*maaya*), Ghana (*biako ye*), Kenya (*untu/munto/mondo*), Liberia (*maaya*), Malawi (*umunthu*), Mali (*maaya/hadama de ya*), Mozambique (*vumuntu*), Namibia (*omundu*), Nigeria (*mutunchi/irwa/agwa*), Rwanda (*bantu*), Lera Leonne (*maaya*), South Africa (*ubuntu/botho*), Tanzania (*utu/obuntu/bumuntu*), Uganda (*obuntu*), Zambia (*umunthu/ubuntu*) and Zimbabwe (*botho/ubuntu*)”.

Subsequently, there are African communities that call *Ubuntu* similar names just as in other African countries. For instance, *maaya* is known in various African countries. A person who has Ubuntu portray the following qualities of love, care, respect, gentleness, kindness, friendliness, generous, vulnerability, empathy, humanness, dignity, and hospitality to others irrespective of gender, race, religion, and culture, the language they speak, nationality, the standard of living or any difference that they might have (Mangena, 2016).

Participants were treated with equal respect and kindness throughout the research process regardless of their differences in terms of race, ethnicity, and level of study, nationality, culture, and religion. The researcher valued the perspectives of participants regardless of any differences that they may have. Participants were allowed to share their experiences without being judged and ensuring that their voices are recognized in the findings (Schreiber & Tomm-Bonde, 2015: 660).

Chikoko and Rugaranganda (2020) cites that “the *Ubuntu* or *hunhu* philosophy is premised on key characteristics such as humanness, kindness, love, compassion and moral values”. Goldman *et al.* (2019) mention that in Zulu or Xhosa Nguni language, respect is *Ukuhlonipha* or *Unembeko* and among the Bapedi is called *Hlompho*, respect in African has a positive impact on promoting teamwork. As a result, in this study, many of the fundamentals of Botho were utilized in the process of focus group interviews with participants and the development of survey questionnaires. It is highly recommended to all researchers to start using this philosophy as their theoretical base to their studies as it made the work of the researcher easier and ethical.

(e) Information Richness Theory/Media Richness Theory (IRT/MRT)

Media richness theory was introduced by Richard L. Daft and Robert H. Lengel in 1984 (Dennis & Kinney, 1998; Ishii *et al.*, 2019; Carlson & Zmud, 1994; Carlson & Zmud, 1999, Germonprez, 2002). Salleh and Moghavvemi (2000) explained that Media Richness Theory is a theory used to describe and evaluate communication mediums used in terms of their effectiveness. This theory was used in this research because the researcher used Microsoft Teams and Conjoint.ly survey software to access data from participants and both are digital methods of data collection.

“Former research by Draft and Lengel in 1983 had theorized media usage in working place, dichotomize the quality of a media to high and low richness” (Yogatama & Wijara, 2012: 302). As a result, online methods of communication that the researcher used fall under high richness. Daft and Lengel (1984) stated that audio and visual methods of communication are high richness as in a video communication, there is body language while exchanging information just as a face-to-face communication.

This theory assisted the researcher to be able to choose the best online methods of communication utilized in the study to collect quantitative data. In that case, this theory stand-by as back up since we are living under Covid-19 lockdown regulations level 1 of which at any

time may be changed to level 5 that which may have a negative impact on the data collection processes. Therefore, the researcher saw an importance to have back up theory for this purpose so that the data collection process happens even under severe conditions of Covid-19 lockdown regulations.

El-Shinnawy and Markus (1997) alludes that rich media such as video conferencing and telephone are proposed to be appropriate for resolving equivocal situations while lean media such as written documents are anticipated to be suitable for declining uncertainty. Daft and Lengel (1983) pointed that each information medium varies according to the feedback, language, source, and channel. Therefore, the researcher was careful when choosing online platforms to collect data in terms of conduction interviews and survey questionnaire development and access to participants.

2.17 Conclusion

In this literature review, concepts that are defined are connected to the conceptual framework of the study. The researcher explored what researchers found about the phenomena and how it had both a negative and positive impact on education. As specified by literature, it is evident that technology is taking over the academic world. Therefore, more studies must be done on how technology can enhance learning experiences with a conscious of overlooking its challenges and benefits in education.

Technological applications such as artificial intelligence and ChatGPT are relevant to education and their roles must be explored further to extend pedagogical methods in approach to teaching and learning. Theories that are used in this study are relevant as they assisted the researcher to understand perspectives of participants and choosing the right research methods to approach this study from data collection to the reporting of findings.

Chapter 3

African Indigenous Philosophical Underpinnings of the Study

3.1. Introduction

“Knowledge is considered valid only if it is produced in ways confirming to methods prescribed by a chosen research methodology” (Massey & Kirk, 2015). There are two research methodologies, namely scientific research methodology and indigenous research methodology. Rationalization of indigenous knowledge using Western research principles changes the data from its real context, therefore it loses its meaning and value (Daric, 2004). Furthermore, when the researcher uses the Western research methodologies, the conclusions will be drawn in a western perspective (Daric, 2004). Therefore, in this study, the researcher used Indigenous research methodologies to avoid the above-mentioned actions.

Drawson *et al.*, (2017) suggest that indigenous communities have the right to choose their preferred data collection methods. In this sense, the researcher seeks for preferences from participants before choosing the data collection methods to find out if they are comfortable and willing to have the data collection methods implemented in the research process. This was done by allowing participants to fill in their demographic information together with their preferred mode of communication and language of communication.

Throughout the book written by Bagele Chilisa, the researcher is in a quest of achieving a goal of ‘the recovering, valuing, and internationalizing of postcolonial indigenous epistemologies, methodologies, and methods (Hanson, 2012). Chilisa (2012), ‘*mmua lebe o abo a bua la gagwe*’ of which it is translated to that ‘everyone has a right to a say, for even what might appear like a bad suggestion helps people to think of better ideas. When doing indigenous research using indigenous research methodologies, the researcher should move beyond indigenous perspective to indigenous paradigms (Wilson, 2001).

3.2. African indigenous worldviews

Different socially built realities are based on various connections that people have with their environment, biodiversity, and the cosmos (Hart, 2007; Appiah-Kubi & Aabaa, 2019). Furthermore, in the spiritual world, Africans understand God as the Supreme Being and ancestors are the second beings in the hierarchy of beings (Appiah-Kubi & Aabaa, 2019).

Numerous African communities believe that nothing came into existence before God (Chalk, 2006).

“The natural world provides the habitat for spirits and sends messages from the spiritual world to the human world as the spiritual world provides guidance, punishment and blessings to the human world” (Millar, 2004). As claimed by Ekwueme and Engwuda-Ugbeda (2016), all countries understand God in different ways in pursuant to how they believe in him, and they have different names for him. For instance, *Bapedi* says *Modimo* as referred to God and *Badimo* as referred to ancestors.

Simpson (2000) outlines principles of indigenous worldviews that knowledge is holistic, cyclic, and relies upon the connections with non-living and living things, there are many truths, and these truths rely on the experiences of a person, everything is alive, and the land is sacred, the connection between the spiritual world and people is important and lastly, individuals are less critical in the world. African Indigenous worldview is rational (Carjuzaa & Fuff, 2010: 76).

3.3. Ontology

Hart (2010) posits that due to people having various worldviews, their ontology varies in conformity with their understanding of what exists and what is not reality. For instance, Christianity and African worldview believe in the existence of God but in Christianity, people who died are seen as angels while in the African worldview they are called ancestors. However, some Christians do not believe in ancestors. Ellington (2019) mentioned that knowledge is relational, meaning that it does not belong to one person but shared with different individuals who created it. In this study, the researcher recognizes various belief systems and interpretations of Covid-19 pandemic by participants.

In the African context, people gain knowledge by dreaming and interpreting the meaning of the dream. In an Indigenous ontology there may be multiple realities conforming to the understandings and perspectives of people (Wilson, 2008). In this study, the researcher did not focus on one idea of a single participant and consider it a reality but include the perspectives of other participants about the researched phenomenon. Furthermore, realities may be multiples just as constructivist research paradigm but what varies is that the truth being “out there” as realities is in the relationship that a person has with the truth (Wilson, 2008).

3.4 Epistemology

When doing indigenous research using indigenous research methodologies, the researcher should move beyond indigenous perspective of indigenous paradigms (Wilson, 2001). “Indigenous methods do not flow from western philosophies, they flow from indigenous research methodologies” (Arsenault *et al.*, 2018). African ways of knowing should be explored and used in indigenous research as part of decolonizing research methodologies (Bhuda & Koitsiwe, 2022). Higgs (2010) states that African epistemologies for research is centred around the question of communalism, therefore, the researcher should address the challenges of the community that is under the study.

Woodroffe (2021) argues that through rationality, our ways of knowing (epistemology) contains our nature of reality (ontology). Hickey (2019) says that epistemology is defined as how people know what they know, and elderly people acquire knowledge through experiences and pass it down to the next generation as it is considered as truth since it is known and practiced for decades. “Indigenous epistemology emerges from traditional languages” (Ellington, 2019).

Language is the most important aspect of communication because the researcher needs to know and understand the languages that his or her participants speak to be able to enquire and share ideas. Braskin (2006) articulates that to know the meanings in the world that we are living in, we need to explore our inner selves by praying, dream interpretation, ceremonies, silence and fasting.

Mashego *et al.*, (2021) articulated that indigenous peoples rely on traditional medicine as primary health care system because there are various medicinal plants that can be used to develop vaccines, but the problem is that traditional medicine is doubted to be effective as it usually not involved in scientific clinical tests. The epistemology of traditional medicine comes from God, spirits, gods, or ancestors, through observation, and testimonials from elders as they are experienced and knowledgeable (Kutesa, 2018).

Held (2019) supported that, indigenous ways of acquiring knowledge are by doing experiments because knowledge is rationale. When reality is understood in a holistic way, African indigenous epistemology is characterized by the meaning to different specific components of reality (Jimoh, 2018:16).

3.5 Cosmology

Karangi (2019) provided that African cosmology is the way in which African communities understand African religion, culture, and spirituality. In the African cosmology, in spirituality God is the Supreme Being who created everything in the world while ancestors become second, and in the physical world, people are the first on the hierarchy of life (Kanu, 2013). For example, ‘*Modimo o mogolo*’ meaning God is supreme.

Martin (2008) acknowledged that African ontology consist of elements such as God, spirits, man, plants and animals, and phenomena. In Ghana, the Akan cosmos understands the world in two different parts such as spiritual and human worlds (Larbi, 2002). Furthermore, in the spiritual universe of Akan Community God is the Supreme Being as they refer to him as *Onyankopon* or *Onyame*.

Hart (2010) highlights that “In indigenous worldview, knowledge is holistic, cyclic, and dependent upon relationships and connections to living and non-living beings and things”. Furthermore, truth is not singular but plural in nature (Hart, 2010). During the process of an interview facilitated by Cheryl White, David Denborough and Bagele Chilisa said that “The experiences of the community members become the ultimate authority in determining what is true and therefore become the final negotiator of the validity of research about their lives” (Chilisa, 2014).

In the African context, Covid-19 is known as ‘*bolwetsi bja mafahla*’ which translates to lungs illness and more knowledge about Covid-19 is established through experiments by using Western health care systems. *Sangomas, ngaka ya sedupe*, traditional herbalists and other traditional healers with different profession are where the primary health care providers (Qambela & Lupindo, 2021). As a result, people are currently vaccinating for Covid-19 pandemic to be contained and reduce the number of new cases while some of indigenous people are not vaccinated but proceeding using traditional medicine to avoid being in contact with the virus. For instance, using ginger and garlic to remove sore throat.

3.6 Methodology

Decolonizing research methodologies by using indigenous methodologies are essential in the building of new ways of reclaiming control over our traditional epistemologies and to restore lost teachings of our ancestors, goals, and values (Kurtz, 2013: 221). Furthermore, “an integral part of indigenous methodologies is the inclusion of cultural protocols, values and behaviours that are ethical, respectful and useful” (Kurtz, 2013: 223). Chiblow (2020) argues that historical research has ruined and damaged the relationships between indigenous knowledge custodians in communities and researchers. This is mainly because Western research methodologies do not align with the indigenous research methodologies.

Indigenous research methodology should include four Rs which are called responsibility, respect, reciprocity, and rights (Kovach, 2010). These researchers conceptualize the four or three Rs in various ways (Housion, 2007; Kovach; 2009; Wilson, 2008; Nicholls, 2009; Martin, 2002). In this research, participants were always given respect as the researcher also expected to be respected, the researcher was accountable for all the research process to have a feasible communication and build healthy relationship with the participants.

Paying attention to the needs of participants by listening actively was key during focus group interviews. In the African context, when a person speaks, one listens actively then given a chance to respond as a sign of acknowledging ideas and respect. The researcher ensured that the participants fully understand and know about the benefits that may arise from the research by pointing them out within the prior and informed consent and lastly the needs of the participants were ensured by also providing non-disclosure agreement that issued out what the participants expect in the research process.

Wilson (2008) noted in *Research is Ceremony* that there are three Rs which are respect, reciprocity, and rationality so as a collective they become rational accountability. “In practice, rational accountability means the researcher considered their relations in choosing topics to research, in the methods used to collect data/build relationships, in how analysis is carried out, and finally in the way outcomes of the research are presented” (McGregor, 2018: 319). However, Kirkness and Barnhardt were the first researchers to outline the significance of “respect, relevance, reciprocity, and responsibility in 1991 (Aveling, 2012).

In an article by Louis (2007: 133), it is stated that respect is not about saying thank you and please, but it is about listening to the ideas of others attentively and not denying that your ideas are good, it is about displaying traits of generosity, patience, and humility when you are doing research with indigenous communities. Hence, the main priority of indigenous research methodologies is based on respectful relationships between researcher and participants to avoid misinterpretation and misrepresentation of knowledge shared (Khupe, 2014).

Kovach (2010: 43) notes that a researcher called Thomas. R utilized storytelling methodology in 2005 in her graduate study and the fact that her grandmothers passed on the stories to her, shaped her understanding of culture, tradition, spirituality, and politics. During an interview conversation between Kovach and Kathy, Kovach, Kathy answered a few questions about research methodology choices and that “When I was thinking about methodology, I think about my experience with my master’s research. My dreams guided my methodology each phase along the way, it was not a research book that I went to. It was my dreams, the questions I had, what to do next, how do I do this, how do I do that, came from dreams” (Kovach, 2006: 128).

Khupe (2020) indicated that researchers among South African indigenous communities hardly highlight the significance of language involved in their research designs and in the process of the research carried out. Students studying Bachelor of Indigenous Knowledge Systems in the North-West University are from diverse provinces speaking different languages so the researcher communicated with students participating in this research according to their language preferences.

Moreover, some of the information gathered was presented as it was acquired from the informants while other information will be translated into English as it is the language of teaching and learning at the university. “It is necessary to engage the whole community, elders, teachers and student’s participation, resulting not only in rich data, but also in community representation” (Keane *et al.*, 2016).

3.7 Axiology

Bhuda (2019) states that in rational axiology, indigenous societies follow protocols that guide their ways of living. “Indigenous research ethics encourages researchers to incorporate alternative perspectives and apply nuanced judgements to any ethical implications” (Shadid *et al.*, 2009). Hence, the participants have control over the research and should lead the research processes (Hart, 2010). In this research, the researcher gave participants power to give directions in terms of their availability to participate in *Lekgotla*. This includes, scheduling times, dates and modes of communication for focus group interviews in agreement with their convenience. Hence, this research promotes voluntary participation.

Chilisa (2012), protocols include ethics. Axiology is the “nature of ethical behaviour” (Donna, 2018). When using the interpretivist paradigm in a research, values are included as presented on the table 1 (Held, 2019). In this study, prior and informed consent was developed and will be either physically or electronically sent to participants during the first meeting. “Ethics more situational and culturally determined” (Prichard, 2009). Furthermore, Indigenous societies have respect for the non-living, living and the spiritual world (Bhuda, 2019). As a result, the researcher gave participants equal treatment and respect regardless of their level of study, race, ethnicity, or any differences that they may have.

3.8 Conclusion

There was a need for the researcher to view the study through an indigenous perspective so that subjective data collected in the study is not manipulated by any other perspective. This is because of deconstructing and decolonizing the research as supported by Bagele Chilisa and other scholars. Therefore, in a nut shell, this is considered to be indigenous research. The lenses of viewing this study as an indigenous study base the research methodology and inclusion criteria of perceptions of participants in their own local languages on the impact of Covid-19 on their academics and the change of pedagogy. Diverging from using African worldview to this study would have limited the understanding of the phenomena under study.

Chapter 4

Methodology

4.1 Introduction

In this chapter, the study settings are explained with maps to show the locations of North-West University and University of Venda so to understand where the research were completed in various environments since this is a comparative study. The research paradigm, methods, tools, study sampling size and procedure, data analysis and ethical protocols considered involved in this study are explained below to show understanding of the methodology that was applied to achieve the aim and objectives of this research. This section also describes how reliability, validity and trustworthiness of the data, tools and methods were ensured.

4.2 Study setting

The study was conducted at the University of Venda and North-West University, Mahikeng Campus. Therefore, further information about these two universities are explained below including their locations, provinces, cities, and municipalities that they fall under as shown on figure 5 and 6.

4.2.1 North-West University, Mafikeng campus.

North-West University, Mahikeng campus fall under Ngaka Modiri Molema District situated in the Northwest Province, South Africa. Ngaka Modiri Molema consist of six local municipalities of which are namely Tswaing, Ratlou, Ditsobotla, Ramotshare Moiloa and Mahikeng. The study was conducted at the North-West University, Mafikeng campus in the surrounding of Mahikeng local municipality as indicated on figure 5. North-West University have three campuses such as Mafikeng, Vaal Triangle and Potchefstroom campuses. Therefore, the study took place at the North-West University, Mafikeng campus. Figure 5 indicates the location of North-West University, Mahikeng campus.

Stats-SA (2016) showed the population of Ngaka Modiri Malema District has a population of 889 108 and the dominant language in this area is Setswana of which ranges to 78.38% than English ranging up to 4.55% and 17.8% of other languages. North-West University, Mafikeng campus had over 68 593 students enrolled from different faculties in 2020 (NWU, 2021). The

current NWU Vice-Chancellor Prof Tyobeka (2023) highlighted that in May 2022, 53 071 students enrolled at the university. Therefore, those who are studying Bachelor of Indigenous Knowledge Systems both at undergraduate and post-graduate studies were 38 in 2017 and the number of students increases annually (Bantham, 2017).

In 2021, there are 121 undergraduate students studying Bachelor of Indigenous Knowledge Systems as the target population of this study. First year students studying Bachelor of Indigenous Knowledge Systems students are 48, 37 second year, 34 third year and only 2 fourth year undergraduate students. However, in 2022 academic year, the number of students became different and improved as indicated on the sample size section (Ndive 2018).

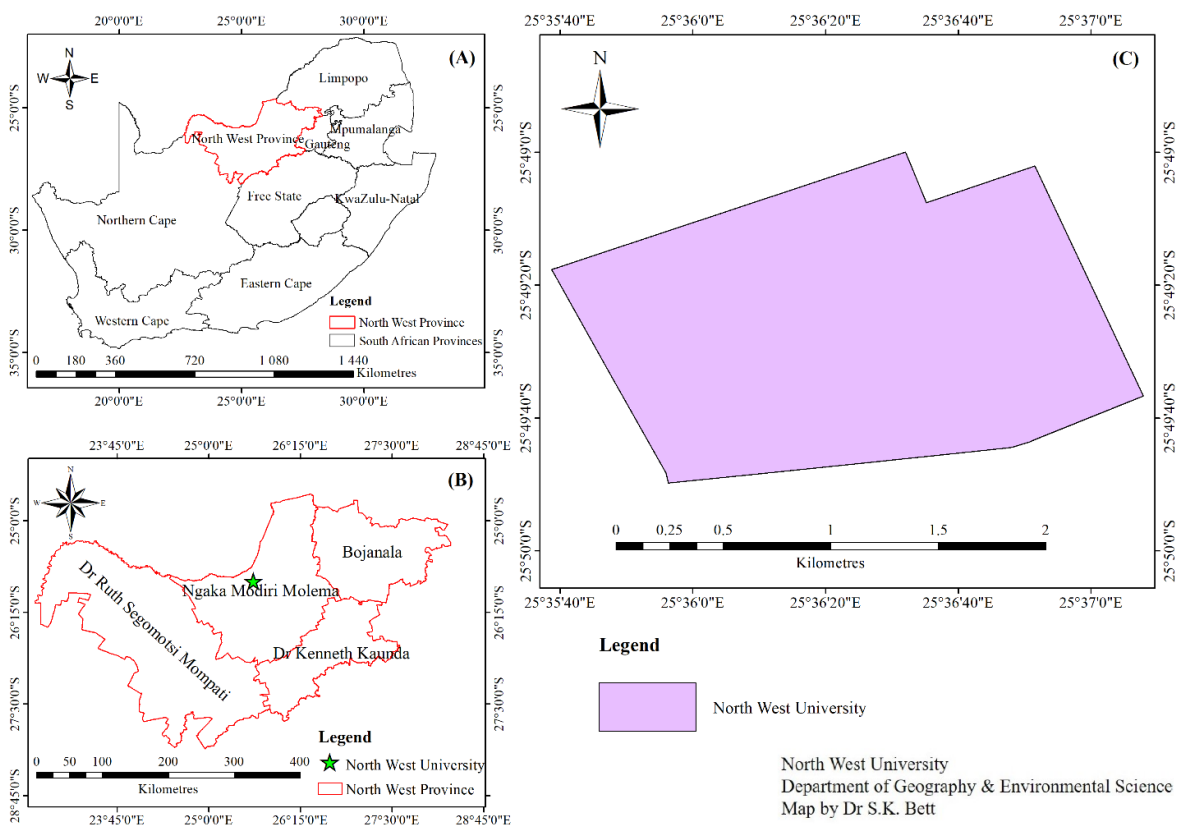


Figure 5: North-West University, Mahikeng campus map by Dr S.K. Bett from NWU
 Department of Geography & Environmental Science

4.2.2 University of Venda

Since this is a comparative study, it involved students who are studying Bachelor of Indigenous Knowledge Systems at the University of Venda. University of Venda is situated in Thohoyandou found around the District of Vhembe in the Limpopo province as indicated in Figure 6. This university was established in 1982 and it has eight schools which are the schools of Education, Agriculture, Human and Social Sciences, Health, Law, Management Sciences, Mathematical and Natural Sciences (UNIVEN, 2018).

Junxion Communications (2012) articulated that University of Venda was found in 1981 under the past Republic of Venda government as the University of the North branch. Netshakhuma (2020) stated that the University of Venda offered qualifications such as Bachelor's, Doctoral and Master's programmes. Furthermore, this university is regarded as a comprehensive university as it offers courses that are theoretical and practical. Students studying at the University of Venda come from different communities around Limpopo province and outside the province to international societies (Gumbo, 2018; Sulej, 2009; Miner & Kahl, 2012; Durowoju *et al.*, 2019).

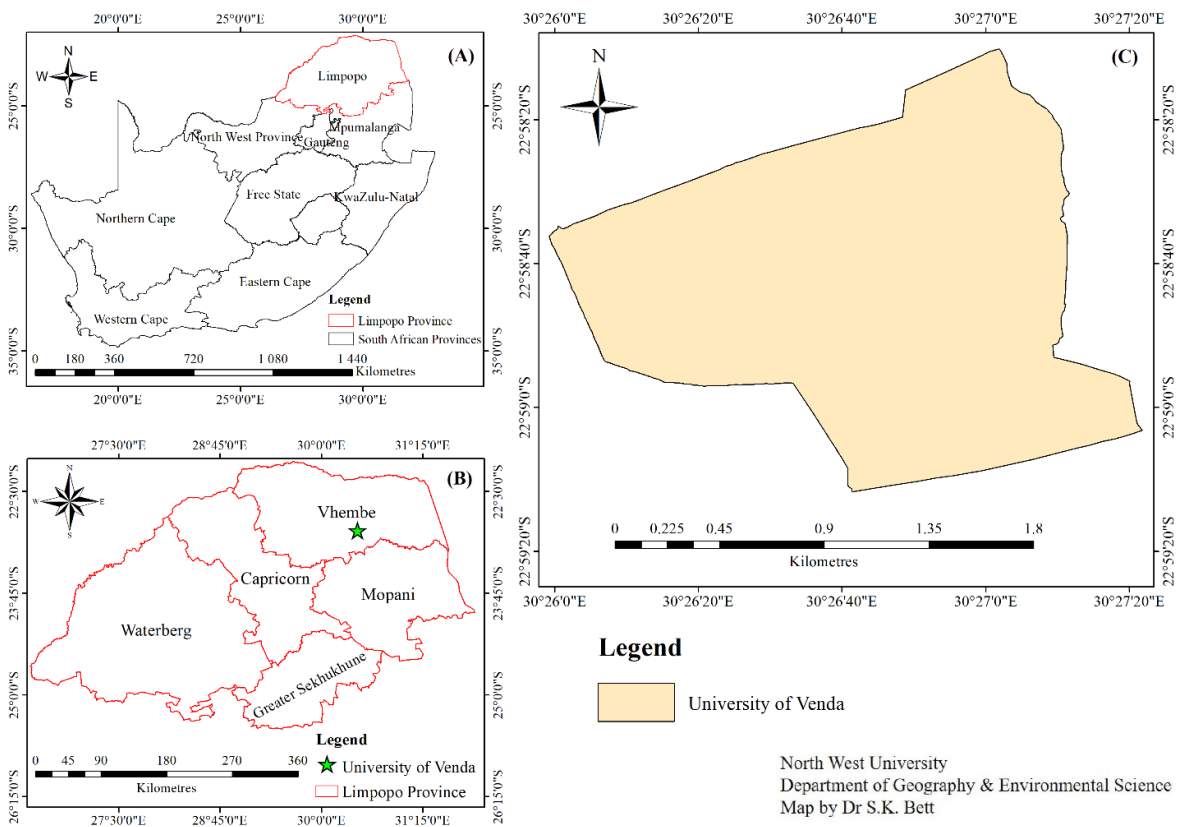


Figure 6: A map of the location of Thohoyandou and other towns in the Limpopo province around Vhembe District municipality by Dr S.K. Bett from NWU Department of Geography & Environmental Science

4.3 Paradigm

The study used the interpretivist paradigm to explore and understand the subjective experiences and perspectives of Bachelor of Indigenous Knowledge Systems students on how Covid-19 had an impact on their studies at the University of Venda and establish the differences and similarities with the collected data from Bachelor of Indigenous Knowledge Systems at the North-West University, Mafikeng campus. Romm (2015) argue that the interpretivist paradigm is associated with explored phenomena that different participants experience while having various views on it since it impacts them in a different way. Hence, “interpretivists adapts a relativist ontology in which a single phenomenon has multiple interpretations rather than a truth that can be determined by a process of measurement” (Pham, 2018: 03).

Dean (2018) posits that interpretivists believes that reality is multiple and complex as a single phenomenon can be understood and viewed in different perspectives. During application of the interpretivist paradigm in qualitative and mixed method research, the researcher reads the experiences of participants in relation to the phenomenon and interpret their behaviour to make sense out of it (Kuvunja & Kuyini, 2017; Riyani, 2015; Dawadi *et al.*, 2021). Furthermore, this paradigm has a connection with grounded theory (Kuvunja & Kuyini, 2017).

However, grounded theory was not utilized in this study. Interpretivist paradigm allowed the researcher to view the universe through the perspectives and experiences of the participants in the study and detaching his own views and feelings to the data.

Goldkuhl (2012) found that “the aim of understanding the subjective meanings of persons in the studied domains is essential in the interpretive paradigm”. The experiences of students studying Bachelor of Indigenous Knowledge Systems were explored and interpreted according to their knowledge, experiences, and perceptions, not with the experiences, knowledge, and perceptions of the researcher.

Interpretivist paradigm was used in an online or physical contact interviews to investigate the thoughts, values, prejudices, perceptions, views, feelings, and perspectives (Willington & Szczerbiski, 2007:81). Hence, in this study, the researcher chose online focus group interviews

and survey questionnaires to collect data. Thanh and Thanh (2015: 25) stated that interpretivist paradigm is based on subjective truth than objective truth. As a result, feelings and thoughts of participants were studied during the discussion in the interviews.

Feature	Description
Ontology	<ol style="list-style-type: none"> 1. There are multiple realities. 2. Reality can be explored, and constructed through human interactions, and meaningful actions. 3. Discover how people make sense of their social worlds in the natural setting by means of daily routines, conversations and writings while interacting with others around them. These writings could be text and visual pictures
Epistemology	<ol style="list-style-type: none"> 1. Many social realities exist due to varying human experience, including people’s knowledge, views, interpretations, and experiences. 2. Events are understood through the mental processes of interpretation that is influenced by interaction with social contexts. 3. Those active in the research process socially construct knowledge by experiencing the real life or natural settings. 4. Inquirer and the inquired-into are interlocked in an interactive process of talking and listening, reading, and writing. 5. More personal, interactive mode of data collection.
Methodology	<ol style="list-style-type: none"> 1. Processes of data collected by text messages, interviews, and reflective sessions. 2. Research is a product of the values of the researcher.

Table 1: Characteristics of interpretivism adopted from (Cantrell, 2001: 298)

4.4 Study design and approach

This is a comparative study that enabled comparison of findings on the Impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students at the University of Venda and North-West University, Mafikeng campus. Investigations started by exploring the impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students at the University of Venda using a mixed method approach then implemented the comparative approach to both the results found to develop a discussion of differences and similarities.

Mixed methods are a method of investigation in which the researcher gathers and analyses data to draw conclusions or solve a particular problem using both quantitative and qualitative methods in a single study (Shrestha & Giri, 2021:27; Doyle *et al.*, 2009; Greene, 2007; Creswell, 2005; Tashakkori & Teddlie, 2003). The researcher compared the results after the discussion phase of the report. Therefore, it was necessary for the researcher to carefully select mixed method research as a methodological approach to this study so to extend understanding of the phenomena regarding the manner in which it had an impact on higher education, students and pedagogy.

In a single study both qualitative and quantitative data analysed contribute to the report of the results (Creswell & Plano Clarke, 2007: 08). Hence, it was necessary to approach the study using different methodological approaches of data collection and analysis. Almalki (2016: 291) stated that mixed methods approach gives a researcher an opportunity to understand the study in a new level of intelligence than focused on a single research approach. The researcher collected data following the explanatory sequential design whereby quantitative data was collected first then followed by qualitative data as indicated by (Creswell, 2003; Creswell, 2009).

A sequential typology was used to validate qualitative data collected using closed ended questionnaires to extend the meaning and statistical meaning of the data meaning of the overall data. The survey questions were developed in consultation with North-West University statistical consultation services to ensure validity, trustworthiness, and reliability of questions for quality findings. Proof of consultation is attached as part of annexures. The researcher attended a Basic Oral History Training Workshop on the 10th of October 2022 whereby the following were learned; development of interview questionnaires, data analysis strategies and transcribing and research title development and methodologies which contributed to better approach and development of this study. A certificate of attendance is attached on the last page of this report.

4.5 Target population

The target population was undergraduate students studying Bachelor of Indigenous Knowledge Systems at the University of Venda and North-West University, Mafikeng campus.

4.6 Sample size and procedure

The researcher used convenience sampling procedure so that all participants who are interested in participating in the study receive a fair opportunity to do so.

4.6.1 Sample size

All students studying Bachelor of Indigenous Knowledge Systems students from University of Venda and North-West University, Mahikeng campus were invited to voluntarily participate in this study. Edwards (2005) argue that the sample size depends on the population of participants. At the North-West University, Mahikeng campus there are 295 Bachelor of Indigenous Knowledge Systems students. Out of this population, there are 186 first years, 41 second years, 37 third years and 31 final year students.

While on the other hand, at the University of Venda there are 274 Bachelor of Indigenous Knowledge Systems students of which 75 are first years, 80 second years, 60 third years and 59 final year students. Therefore, as the survey links were made available to each and every undergraduate BIKS students, there were no limitations of the number participants to share their experiences in this study.

The researcher targeted 40 participants which is a sample size established by the use of stratified random sampling from the population of IKS students from North-West University and University of Venda. These number of participants were chosen according to the level of years. For instance, in each level of years in both universities, 5 participants were chosen in each academic year whereby first years were equal to 5, second years = 5, third years = 5 and final years = 5 which adds to 20 participants in each university.

On the other hand, due to voluntary participation that the study implemented, researcher managed to recruit 5 participants from NWU and 3 UNIVEN IKS students from different academic levels who participated in a 3 focus group interviews respectively. Hence, 33 participants from NWU and 15 from UNIVEN managed to complete the survey questionnaires through convenience

sampling procedure. Therefore, an overall number of participants who were recruited to complete the survey questionnaires were 44 as multi-institutionally combined.

4.6.2 Stratified random procedure

In this study, stratified random sampling procedure was implemented to select participants from North-West University and University of Venda in accordance with their level of study. During stratified random sampling, the researcher separates the entire target population into strata (Teddlie & Yu, 2007:79). As a result, the sample of participants includes a blend of gender in terms of the number of participants targeted.

Taherdoost (2016) articulated stratified random sampling procedure is used when the target population vary. In this study, participants vary as per their levels of study because there are first, second, third and fourth-year students studying Bachelor of Indigenous Knowledge Systems. The researcher also used gender to choose participants so as to balance the gender of participants. That was the reason the researcher developed demographic information form that was filled by potential participants so to establish their gender for stratified random sampling.

Five participants in each level of study were to be chosen in line with their gender. Therefore, (20) twenty participants were part of the focus group interviews in each of the university of which makes the sample size of 40 participants were targeted to be involved in the Focus group interviews while all BIKS students were targeted to participate in a survey. There was a need for the researcher to use the level of study and gender to select participants so to have a blend of variance in the sample of participants. Their level of academic years spent in the university studying the course counted to the amount of information they had with regard to how Covid-19 had an impact on their studies.

4.6.3 Convenience sampling procedure

The researcher used this sampling method to include the entire target population of students to participate in the survey data collection method pursuant to their availability. Since this study collected data during mid-year examinations, the survey was open for a period of 2 months so to allow all students who are interested to participate. As mentioned by Emerson (2015), convenience sampling answers the question in which individuals who fit the criteria of the research are identified immediately and used as participants.

“Convenience sampling is affordable, easy and the subjects are readily available” (Etikan *et al.*, 2016). All Bachelor of Indigenous Knowledge Systems students from North-West University and University of Venda were invited to participate in the survey. This was implemented to ensure that data collected biasness is erased as to extend the subjectivity and statistical meaning of the data by not using any sampling method that is selective to participants conforming to their level of experience, gender or any nature of differences they have. Hence, accommodating all students in this study to share their experiences had no limitations to respond to questions

4.7 Data collection tools and methods

It is cited in Ivankova *et al.* (2006) journal article that, it is important to support scholars to visually represent mixed methods measures for their research by providing guidelines. Therefore, the researcher used Conjointly survey platform to develop an online survey whereby open-ended and closed-ended questionnaires were made available in the survey to collect quantitative and qualitative data. Open-ended questions were made available as follow up questions to closed ended questions to get the meaning of the responses.

On the 25th of May 2023, the survey was launched for pilot study. On the 7th of June 2023 survey was launched for the main data collection process. The reason of launching the survey earlier before qualitative interviews were due to the fact that students were writing exams and agreed with the researcher to start with the survey before focus group interviews. Hence, focus group interviews needed to be scheduled after the examination and recess period. This was done as completion of surveys can be done at anytime and anyplace by accessing the questionnaires through links without any disturbance of their daily responsibilities.

Survey links were sent by researcher to participants in their academic WhatsApp groups were those who accepted the invitation started to participate. The survey was made accessible on any devices such as desktop, smartphone, tablet, and laptop so that all participants have an impartial chance to complete the survey.

The researcher collected qualitative data by using focus group interviews where both open-closed ended questions were asked and discussed. This type of interview was conducted by the researcher with participants in an online environment using Microsoft teams. The researcher used a smartphone device, laptop and a flash drive to have the online focus group interviews. The smartphone assisted the researcher to connect the laptop to the internet while the flash drive was

used to save the data from the laptop. The laptop was used to sign into the Microsoft Teams to allow recording of the meeting.

Pienaar (2015: 12) mention that the format of focus group interview is similar to individual interview. The researcher chose *Lekgotla* method so to have discussions with Bachelor of Indigenous Knowledge Systems students studying at the level of study at the same time as they share a common thing. As indicated in figure 7 below, on the 10th of July 2023, the researcher had a focus group interview with 2 first year students from North-West University. These two students said to have been in grade 10 in high school during Covid-19 lockdown and therefore shared their lived and learned experiences during the discussion. On the 20th of July 2023, the researcher had another focus group interview 3 students from North-West University.

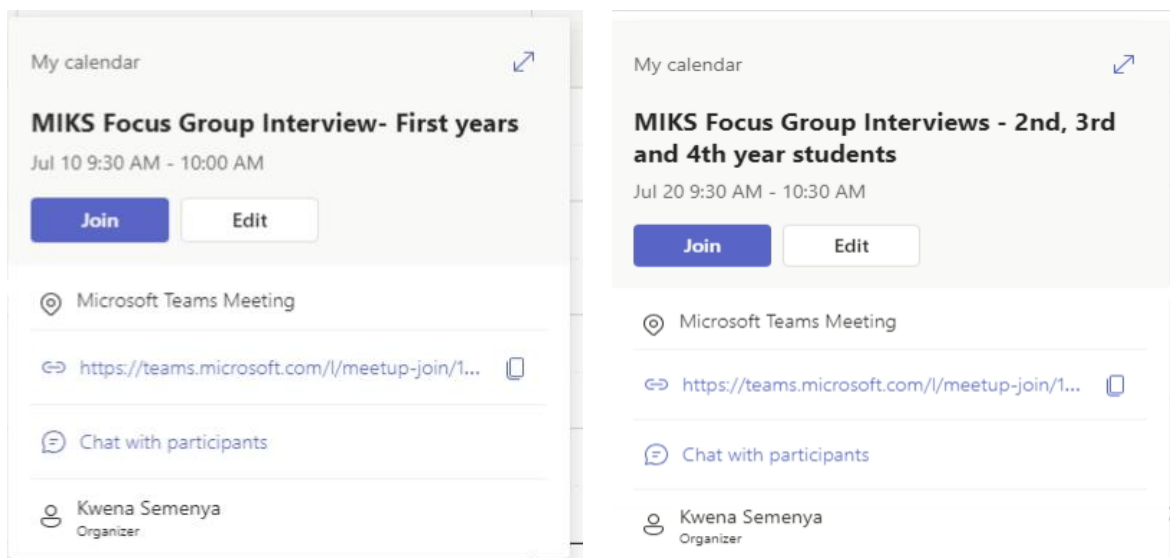


Figure 7: Focus group Interviews with North-West University, BIKS students

In figure 8 below, it is indicated that the researcher had a focus group interview with 3 participants from University of Venda. The researcher aimed to recruit 20 BIKS students from University of Venda but managed to recruit 3 participants through voluntary participation who participated in the focus group interview. However, this did not have a negative impact on the data because each level of year was represented by a student who is currently enrolling in 2023 academic year. Hence, the survey questionnaires had both open-ended and closed-ended questions. Therefore, this indicates that an overall number of participants in the focus group interview is 8.

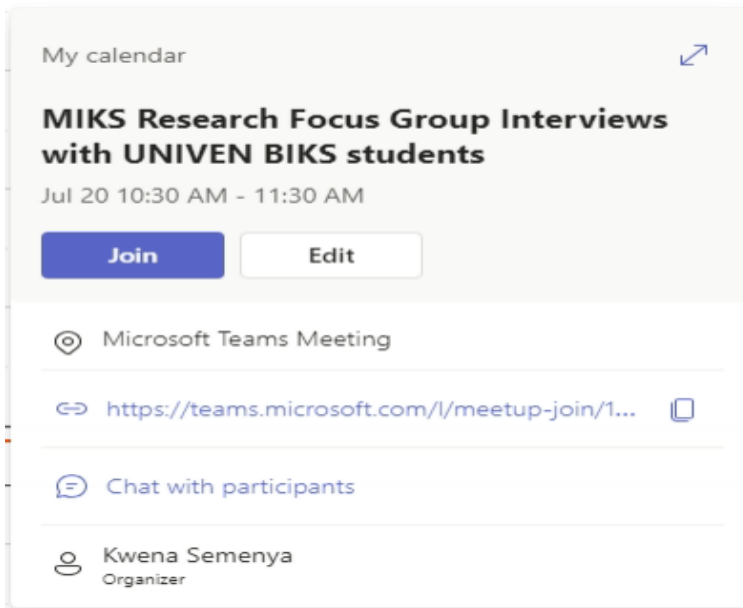


Figure 8: Focus group interview with University of Venda, BIKS students

Archibald *et al.* (2019) suggest that online methods of collecting data may be more attractive than in-person interviews due to their flexibility, accessibility, cost-effectiveness, and efficiency. However, the researcher seeks preferences from potential participants on whether they would like to participate in *Lekgotla* using online platform called Microsoft Teams or face-to-face depending on their circumstances. The focus group interview was held through online interactions using Microsoft Teams as the choice of this mode of communication was taken by participants as they indicated on the demographic form that they wanted online focus group interviews.

Hensen *et al.* (2021: 08) pointed that remote data collection methods under Covid-19 make face-to-face data collection method to be less feasible. Video interview is the same as face-to-face interviews (Saarijarvi & Bratt, 2021: 393). However, the researcher and participants had to be equipped with adequate knowledge about how video conferencing work so interviews can be held successfully. The researcher used the online platform in the previous year while on the other hand students used it as part of online learning and it was successfully implemented.

Participants indicated that it was perfect for us to conduct the focus group interviews after the examination period of which was end of July 2023 so to accommodate those who are studying. The interviews schedules were created as per the availability of participants. However, this did not affect the researcher to collect data on time and compile a report.

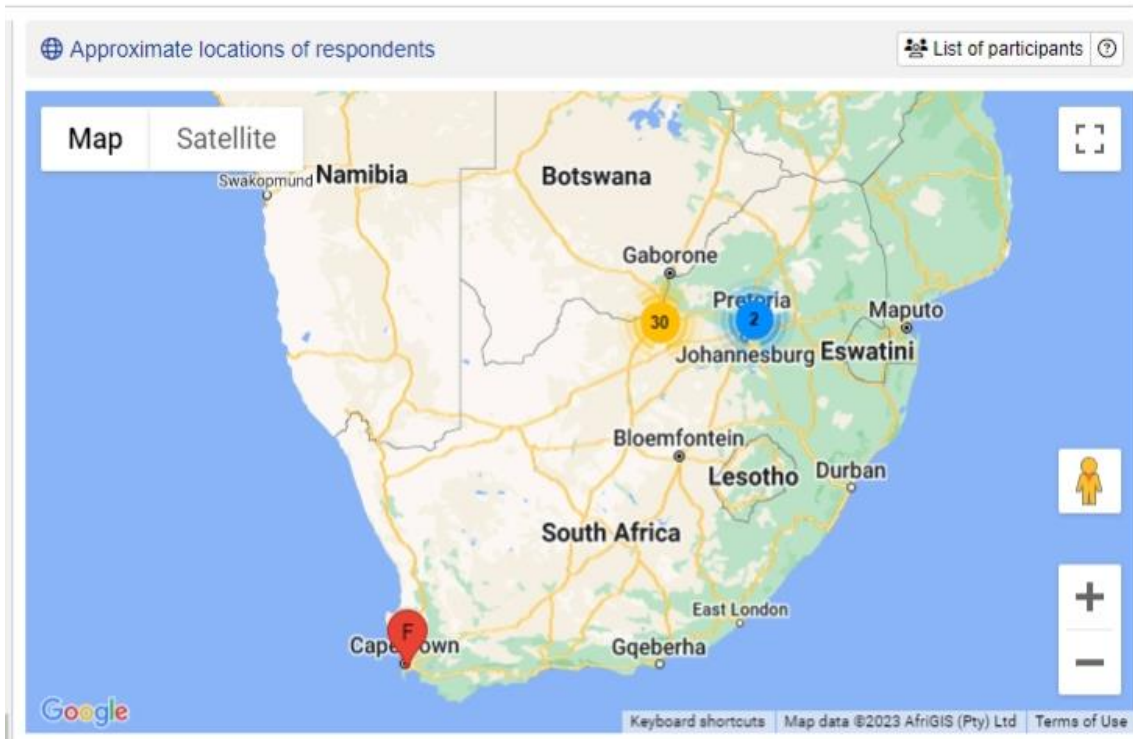


Figure 9: Approximate location of respondents when completed the survey: picture processed by Conjointly (Schreenshot by Kapsell Kwena Semenya)

Quantitative data was collected using surveys developed on Conjoint analysis platform. “Survey research can use quantitative research strategies” (Ponto, 2015: 169). The researcher developed closed ended questions whereby participants chose answers that apply to them from the multiple-choice questions provided. Krause (2011) affirms that many researchers use qualitative data collected to develop survey questions. In this study, closed ended questions were asked. Some of the survey questionnaires were developed based on qualitative data collected to gain more statistical information from participants. However, open ended questions were asked on the survey for the students who did not manage to participate in the focus group interviews to share their thoughts. The figure 9 indicates the location and number of students who participated in the survey.

Figure 9 above indicates the location of participants when they opened the survey link and completed the survey. It is further indicated that on the blue colour, 2 participants were in Gauteng province when they completed the survey while red colour mark indicates that only 1 person was in Cape Town. The yellow colour mark on the map shows that 30 participants were

in the North West province when they completed the survey. This make-up the 33 number of participants who are identified as North-West University (IKS) students.

4.8 Data analysis

In a mixed method approach, both qualitative and quantitative data is gathered and analysed separately (Arora & Stoner, 2009: 274). Qualitative data collected from participants who are Bachelor of Indigenous Knowledge Systems students at the University of Venda was analysed using thematic analysis. Following the thematic analysis steps of outlined by Braun and Clarke (2006), (i) the researcher will read all the transcribed data from focus group interview carefully; (ii) After being familiar with the data, phrases and concepts that were considered significant and recurring were highlighted by colour-coding; (iii) The codes that matched from different datasets were then regarded as themes; (iv) themes were defined and defined themes influenced the emergence of subthemes and similar themes; (v) themes were reported as the findings of the study.

When themes and subthemes were reported, participants from North-West University were regarded as Participants. For example, Participant 1, 2, 3 and so on while participants from University of Venda were regarded as Respondents. For instance, Respondent 1, 2, 3 and so on. Therefore, it was significant for the researcher to use different words as substitute to the real names of participants for easy comparative analysis.

Fereday and Muir-Cochrane (2006) alludes that inductive and deductive approach to thematic analysis can be undertaken at the same time or separately by choosing a single approach. In this study, the researcher chosen an inductive approach. “Codes that comes from the data itself (inductive coding) “(Xu & Zammit, 2020: 02). It was significant for the researcher to follow these steps so to successfully analyse the data and prepare it for reporting. Comparably, quantitative data was automatically analysed by Conjoint analysis platform of which outputs were interpreted in the form of horizontal bar graphs and pie charts.

Conjoint analysis is a method of data collection that enables companies to enquire to their customers by developing surveys to gain perceptions, attitudes, preferences, and ideas from customers to offer a better service or improve their goods (Agarwal *et al.*, 2015). The researcher had a good research experience with regard to using the survey platform for quantitative data collection as successfully used in the previous study titled “Exploring the Impact of Covid-19

on Bachelor of Indigenous Knowledge Systems students at North-West University, Mafikeng campus”.

After all the data is analysed and discussed, a comparative analysis of the datasets was implemented to establish their differences and similarities of the data analysed. “A comparative perspective exposes weaknesses in research designs and helps a researcher improve the quality of research” (Miri & Shahrokh, 2019: 01). Qualitative and quantitative findings can be comparatively analysed separately (Mahibul, 2014; Adiyia & Ashton, 2017; Rickcance, 2001; Hankel *et al.*, 2021; Buttencourt & Lobo, 2019) However, the researcher compared the datasets to show their relationships and differences collectively not separately.

Furthermore, the study used the student’s t-test to determine the statistically important differences between student’s responses to their teaching and learning experiences. In this type of test, $t = \frac{x_1 - x_2}{\sqrt{\frac{s^2}{n_1} + \frac{s^2}{n_2}}}$ of which x_1 and x_2 are sample means respectively. This was done due to having participants who are studying BIKS in varying academic years in 2 varying institutions of higher learning. Hence, t is equivalent to x_1 which is North-West University number of participants and x_2 which represents the University of Venda participants. $48 = (33 - 15)$.

4.9 Ethical considerations for the study

The letter of approval or introductory letter from the North-West University, Indigenous Knowledge Systems Centre was obtained of which demonstrates that a proposal was presented and approved by the committee. Ethical clearance certificate was obtained after application was made to North-West University Faculty of Natural and Agricultural Sciences Research Ethics Committee (NWU-FNASREC) with ethics reference NWU-01212-23-A9.

Since the study used students as participants into the study, permission to use the information of students was granted from North-West University Data Gatekeeping Committee (RDG) with ethics reference NWU-01212-22-A9. Permission to conduct the study with the University of Venda was also granted from University of Venda Faculty Higher Degrees Committee (FHDC).

Participation in this study was entirely voluntary. In that sense, there were no participants forced to participate in this study. Students who chose not to partake in this study were not academically affected or punished in any way. As claimed by Hogan (2008: 02), when people voluntary participates in research, they should have knowledge about the study before they decide to partake in the study and have authority to withdraw their decision made at any time. Prior and

informed consent given to participants ensures that participants are given an opportunity to freely accept or reject to partake in the research (Ubi *et al.*, 2020: 55).

Prior and informed consent, non-disclosure agreement and demographic information form were provided to seek for the permission from potential participants to volunteer to partake in the study. Targeted population of all BIKS undergraduate students were informed about the study through distribution of research information. These documents were sent to NWU and UNIVEN WhatsApp groups together with a video of the researcher which included in depth explanation of the study to the target population.

Students who were interested in participating in this study had signed informed consent and filled in the demographic information forms and forwarded them to the researcher for recruitment. A video was recorded by the researcher with introduction and explanation of the content of the prior and informed consent and sent along with documents in the WhatsApp groups.

Furthermore, students who did not understand the study asked questions by texting the researcher on WhatsApp and calling to get answer to questions. The researcher saw a need to explain the research in the language that accommodates all students which was English when recording the video and presenting information of the study.

Nnuebue (2010) quoted that “signed consent forms should be dated, with a copy being to the participant, a copy stored in the medical notes and original kept with the research data in a locked filing docket”. Therefore, documentations of the study are kept safe and confidential in a locked cardboard in the study room of the research where no one has access to the room.

Apparently, participants agreed that they need their faces to be blurred as screenshots of online focus group interviews were taken. Witman (2005: 261) argues that a non-disclosure agreement should explain in detail about which information is confidential and how the third party is allowed to use the information. For instance, the personal information of participants in writing a report will not be disclosed. The researcher used “Respondent 1, 2, 3, 4, 5, 6, 7 up to the number of arguments made by participants to avoid using the real names of participants when reporting the analysed data. The researcher guaranteed no harm caused of any nature to the participants.

The African philosophy called Ubuntu as a moral theory assisted the researcher to use its values such as respect to guide ethical process of conducting focus group interviews. For instance, during

interviews, the researcher and participants were encouraged to promote respect in conversations. Values of Ubuntu vary in accordance with their nature and objective. Therefore, the researcher was also sympathetic when participants were sharing their lived painful experiences as there was sensitivity with in stories of participants. For example, some of participants mentioned the loss of parents, family relatives and friends during focus group interviews of which the researcher and participants had to be careful as this information was treated as a sensitive and personal matter.

4.10 Validity, reliability, and trustworthiness of the study

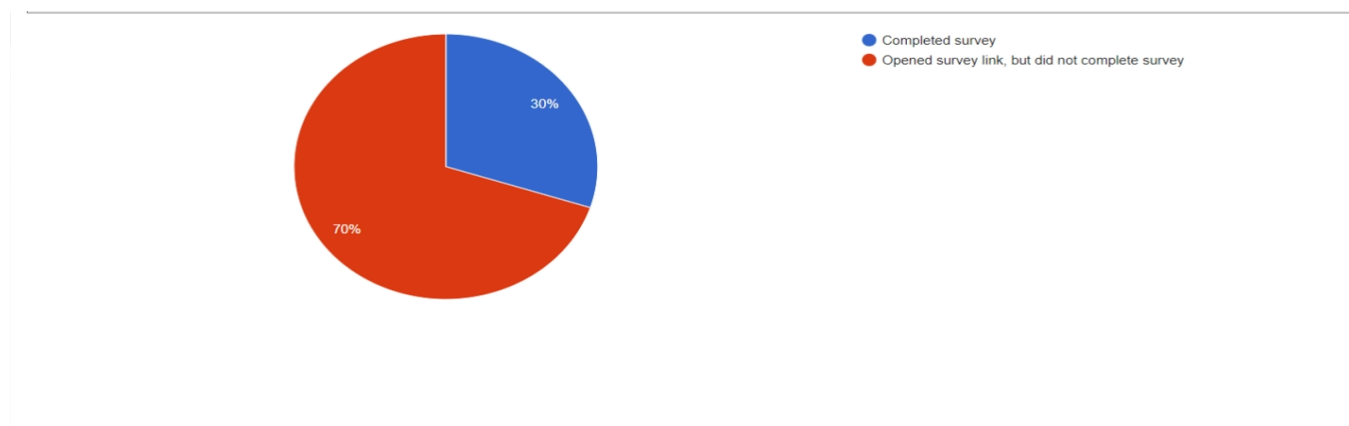


Figure 10: Chart representation of pilot study participation of students

In the figure 10 above, pilot study was conducted by the researcher with random North-West University students by sending survey links to students studying different courses in the university to test the survey tool. Therefore, 30 students opened the link while only 9 completed the survey of which 21 students did not continue to complete the survey.

On the chart, 30% represents 9 students and 70% represents 21 students who attempted to complete the questionnaires. The purpose of the pilot study was to test the survey tool. The pilot study assisted the researcher to amend the main study survey tool with more open-ended questionnaires and allocation of option to enter thoughts by participants when answering an open-ended questionnaire. This method of asking both open-ended and closed-ended questionnaires was implemented to triangulate the qualitative data collected.

The reliability of the data collection tools and methods is already measured as the previous study was successfully carried out. Therefore, the researcher performed member checking to ensure that the data collected from participants is accurate and valid to avoid biasness and

misinterpretation. Busetto (2020: 07) mention that member checking can be undertaken when the data collection process is complete before analysing the data. Member checking after doing data analysis can be beneficial to add credibility and reliability on the results (Birt *et al.*, 2016; Harper & Cole, 2012).

The researcher ensured the validity of the findings by writing the assumptions and views of the participants the way they said it, in their local language because the researcher might lose the correct meaning while trying to make interpretations and translations. However, translations were made from ethnic language to English while writing without manipulation of the data where necessary. Furthermore, the researcher kept captured videos and pictures of focus group interviews to ensure the trustworthiness of the data.

The validity and reliability of the data will be ensured by using a mixed method approach to collect data. Mixed methods approach involves the triangulation of qualitative and quantitative data based on their integration (Mertens & Hesse-Biber, 2012: 76). Survey questionnaires and *Lekgotla* serves as a data collection method and as the data vary, they serve as triangulation of data. As specified by Kelle *et al.* (2019: 10), this is regarded as a methodological triangulation.

Data collected in the form of pictures, voice recording and videos is kept safe in the drive that has password. Throughout the research process, the researcher will avoid being bias by allowing Bachelor of Indigenous Knowledge Systems students at the University of Venda to share their perspectives and voices about how Covid-19 had an impact on their studies without being judgemental or interfering them and also sticking to the research ethics. Audit trial is one of the ways to increase the reliability of the results (Zohrabi, 2013). The researcher explained in detail about how data will be collected, analysed, and reported.

4.11. Conclusion

This chapter unpacked the methodological approach that was undertaken into this study to compile the data presented in the next chapter. It is evident that the quality and quantity of the data presented in this report depends on the methods implemented to produce the data. Therefore, there is a need for researchers to select the best methods for their study so to have their research questions asked correctly and clearly answered. In a nut shell, the researcher chose relevant methods to approach and collect data for the purpose of reaching out to the aim and objectives of this study and meet its needs.

Chapter Five

Findings and Discussions

5.1 Introduction

It was vital for the researcher to report separately the analysed data collected from Bachelor of Indigenous Knowledge Systems students at the North-West University and University of Venda and for each data set to have a section on discussion to have a clear presentation of the report. Hence, the comparative analysis of the data followed after both data collected in these institutions were reported and discussed.

5.1.1 Findings from North-West University, BIKS students

(a) Reflection of participation in this study

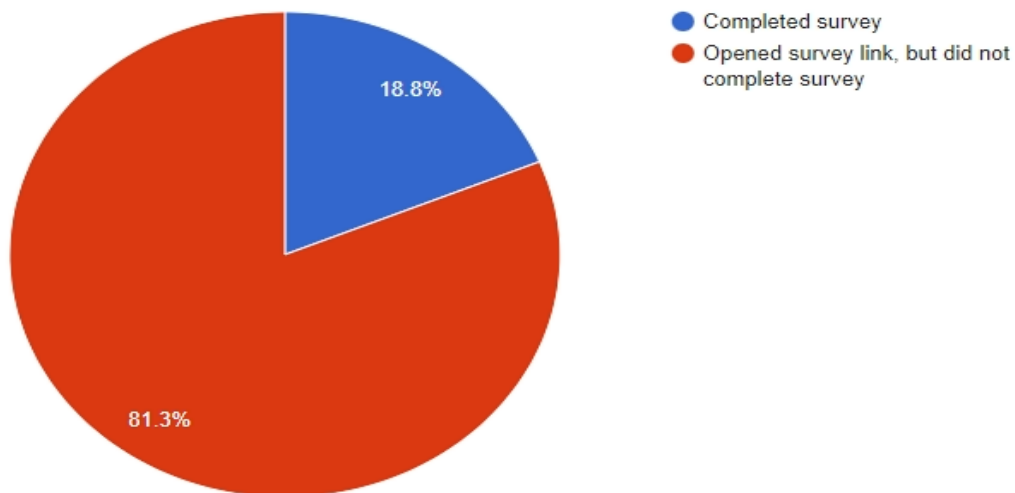


Figure 11: Number of students who completed and did not complete the survey

The survey access link was sent to the target population who are Bachelor of Indigenous Knowledge Systems students at the North-West University. Therefore, out of 295 students, only 176 students opened the link to access the survey as they showed interest in participating in this study. In figure 11 above, only 33 participants managed to complete the survey which is 18.8% out of 176 students while on the other hand, 143 of which is 81.3% opened the link but did not complete the survey. This survey platform recorded participants who did not complete the survey

with the progress they made while trying to go through the survey questionnaires and those who completed all the questionnaires and submitted their responses. Out of the 33 participants, there was no participant who skipped any survey questionnaire as indicated on Conjointly.

(b) Demographic information of participants

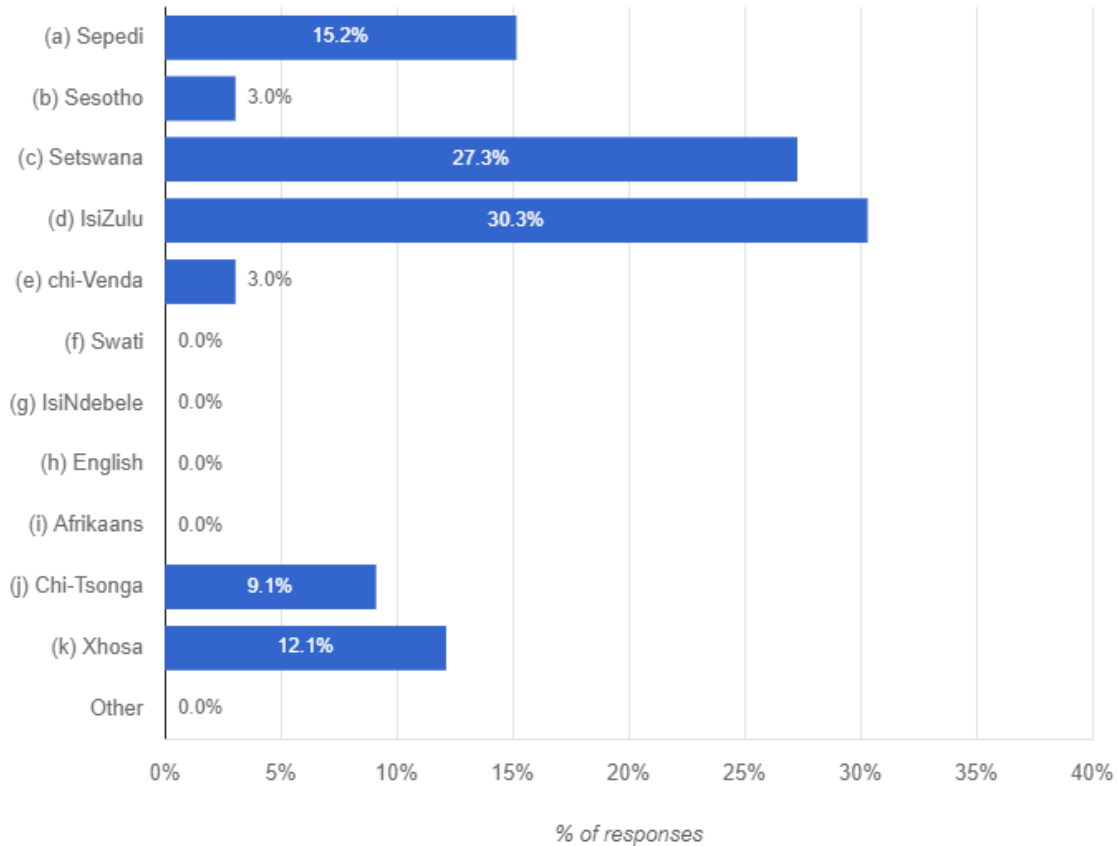


Figure 12: Representation of home languages of 33 participants

In the figure 12 above, 15.2% of participants spoke Sepedi as they are from Limpopo province, 3% of participants were from Lesotho as they spoke Sesotho, 27.3% spoke Setswana as they are from North-West province, 30.3% of participants spoke IsiZulu as they are from KwaZulu-Natal, 3% of participants are from Limpopo as they spoke TshiVenda, 9.1% of participants are from Limpopo as they spoke Tsonga language and 12.1% are Xhosa speaking participants. However, there were no participants who spoke Swati, English, Afrikaans or other languages as their mother tongue. Therefore, it is evident that participants come from different cultural backgrounds and environments.

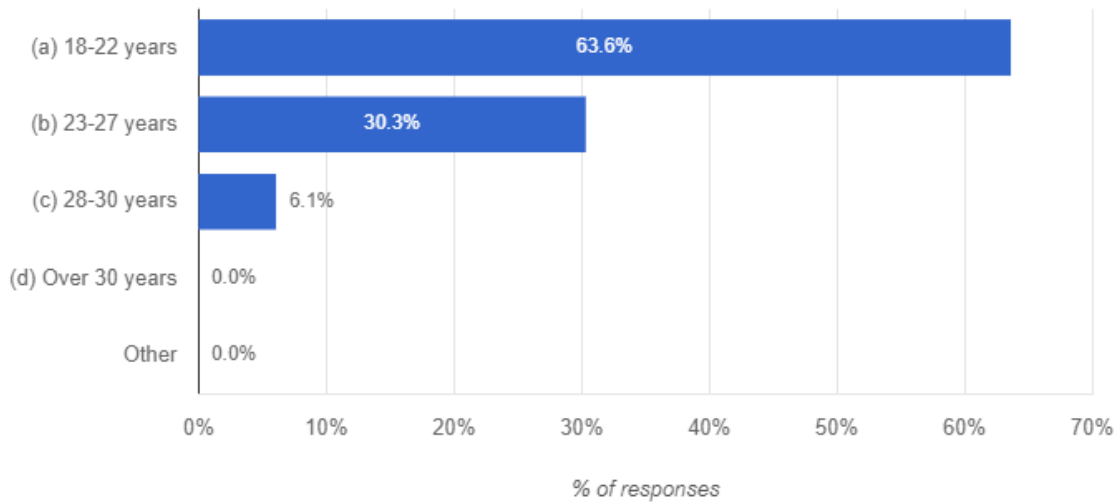


Figure 13: Demonstration of ages of participants

Out of 33 participants, 63.6% of participants were aged between 18-22 years old. 30.3% of participants were aged between 23-27 years old and only 6.1% were aged between 28-30 years old. However, there were no participants who were aged over 30 years old as indicated on the bar graph above. This demonstrates the level of maturity of participants who were part of this study and serve as proof that participants were not toddlers. Furthermore, figure 14 below revealed that out of 33 participants, 24.2% were males while 75.8% were females. Hence, there were no participants who did not want to disclose their gender.

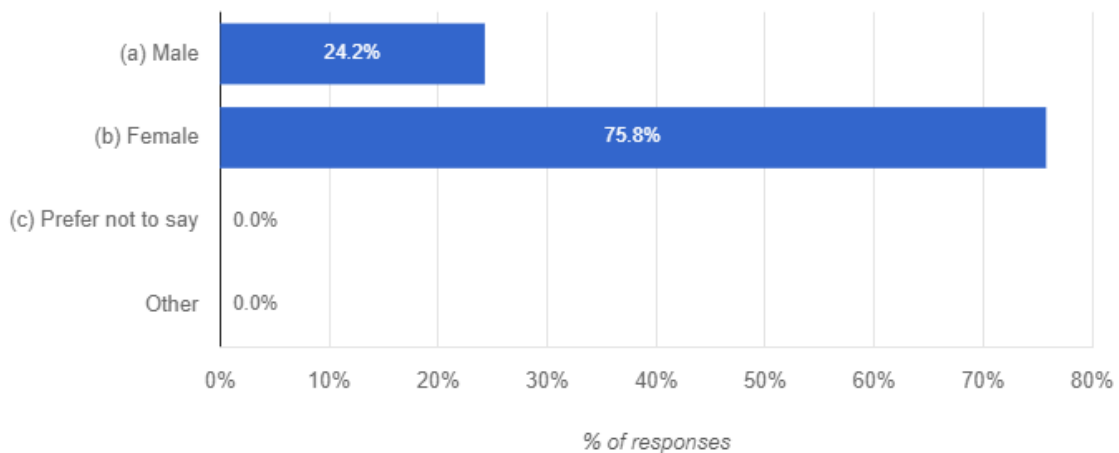


Figure 14: Demonstration of gender of participants

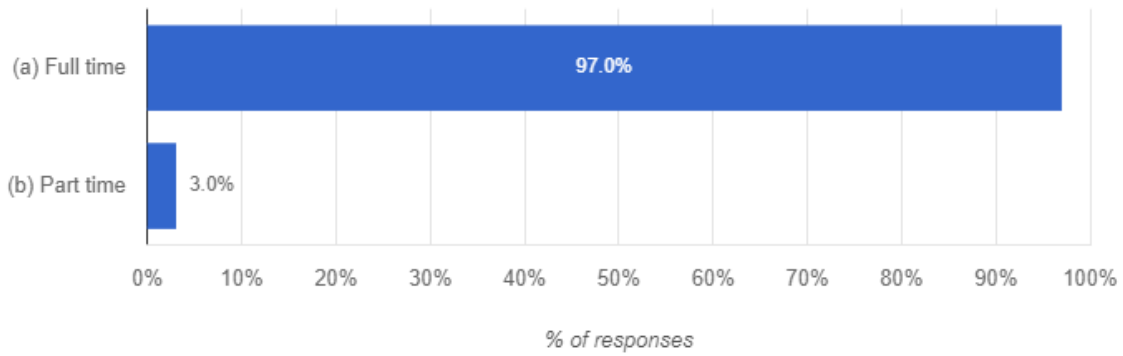


Figure 15: Mode of attendance and studying BIKS of participants

Figure 15 above demonstrates that 97% of participants attend their classes full time as they study their course while 3% stated that they study part time. In the figure 16 below, it is evident that 18.2% of participants are studying BIKS on their first year, 51.5% of participants are on their second year, 24.2% are on their third year and 6.1% are on their final year. Therefore, participants who completed the survey are studying the course in different academic level of years.

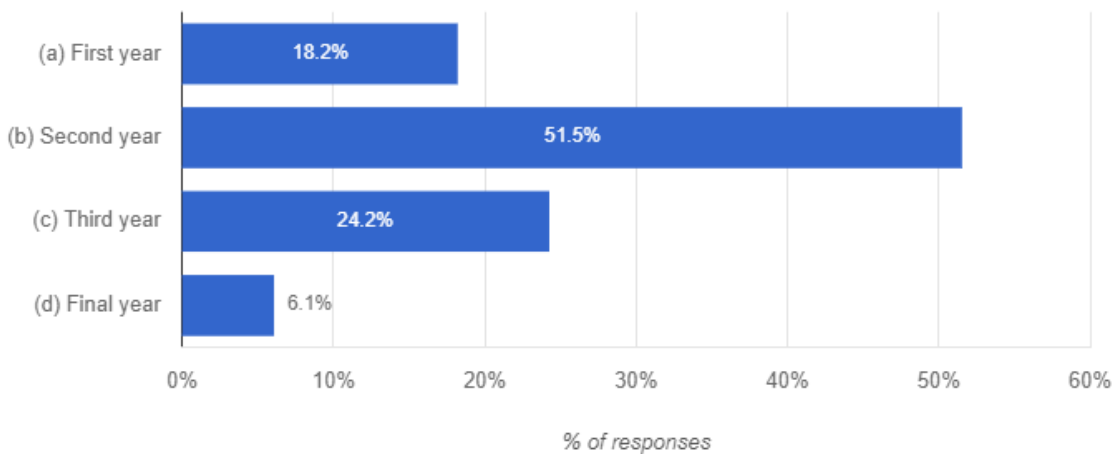


Figure 16: Representation of level of study of participants

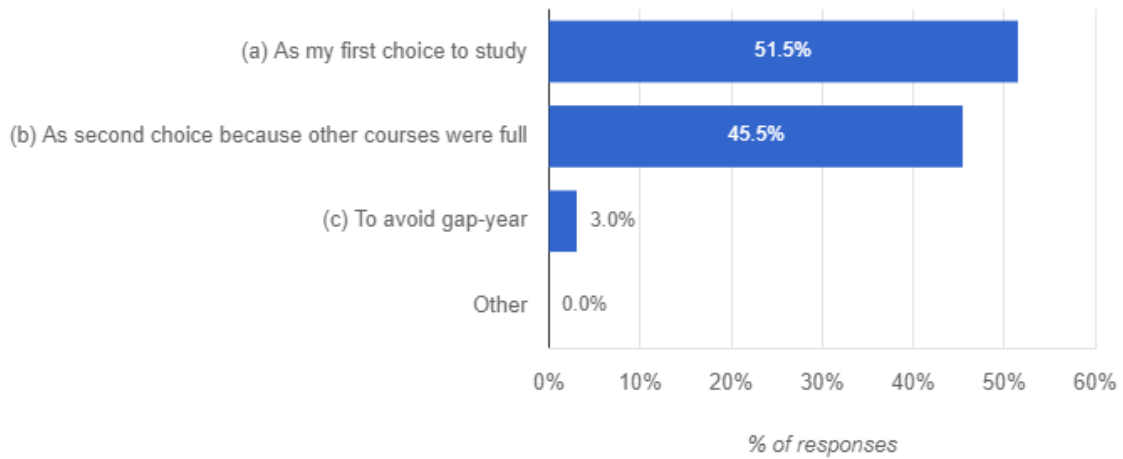


Figure 17: Representation of reasons for studying BIKS by participants

In the figure above, out of 33 participants, 51.5% participants confirmed that they applied for Bachelor of Indigenous Knowledge Systems as it was their first choice of study while 45.5% chose the option that they made it as a second option. This means that they applied for other courses as their first option and after the university administration rejected their first option course application, then got accepted for BIKS. The other 3% said that they chose to study BIKS so to avoid gap year. Hence, in the horizontal bar graph below, it is represented that 84.8% developed love and passion to study BIKS while 15.2% participants do not have love and passion for studying the course.

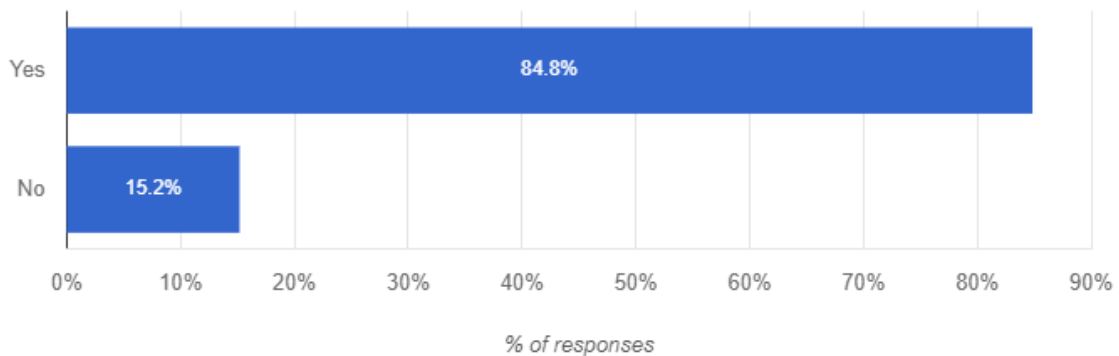


Figure 18: Representation of how passionate participants felt about studying BIKS

(c) The impact of Covid-19 on BIKS students

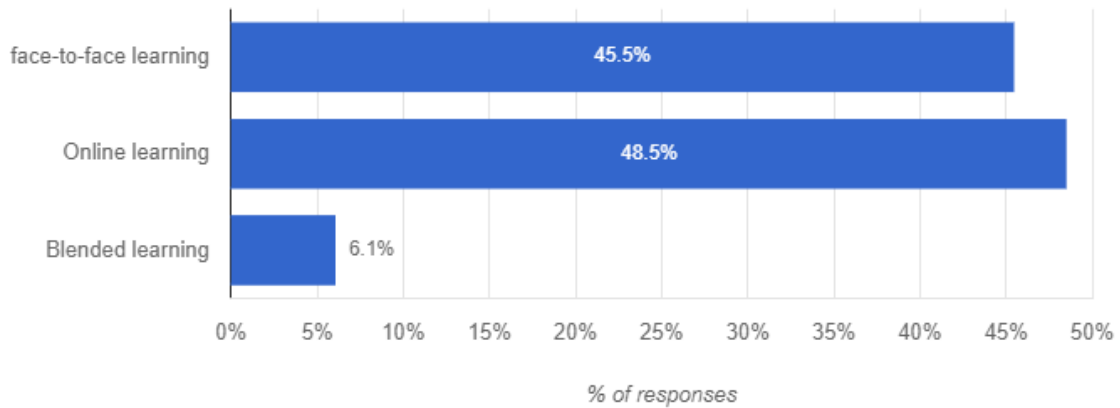


Figure 19: Representation of pedagogy used by participants before Covid-19 pandemic

The representation above proves that 45.5% of participants were studying by using a face-to-face pedagogy while 48.5% used online learning. Blended learning was cautioned after the existence of Covid-19. However, 6.1% of participants showed that they were studying BIKS using blended pedagogies before the beginning of pandemic. In the figure 20 below, 75.8% confirmed that they were negatively affected by Covid-19 lockdown. This depended on how they benefited and were challenged by the transition of pedagogy from online to face-to-face vice versa depending on the Covid-19 lockdown regulation levels changes.

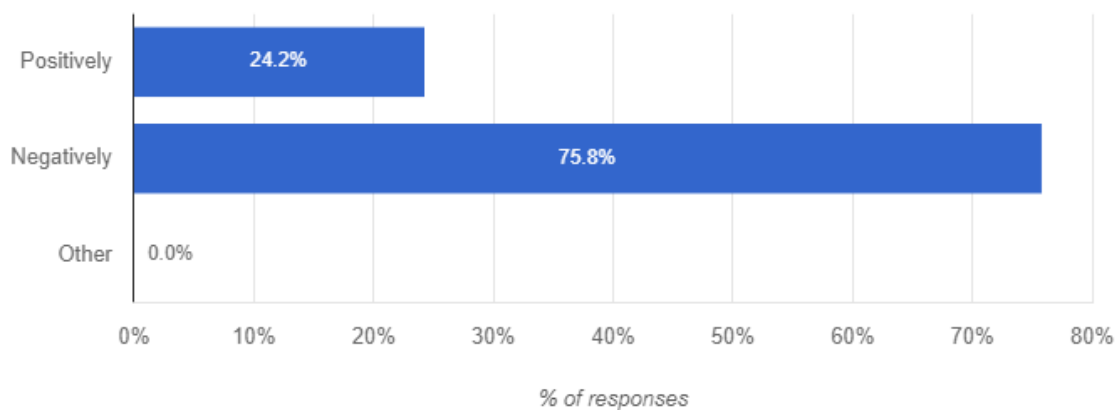


Figure 20: Representation of the impact of Covid-19 lockdown on participants

(d) Negative impact of Covid-19 on participant’s studies

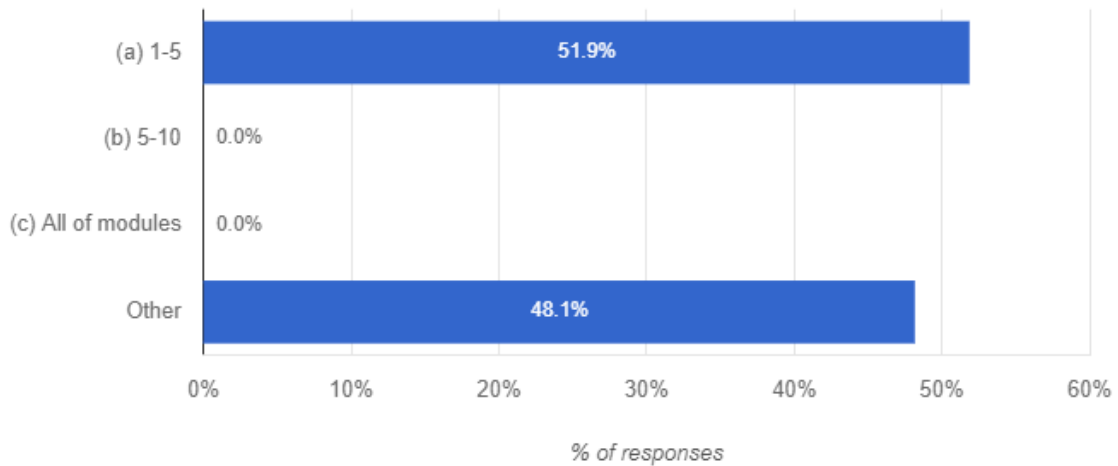


Figure 21: Representation of number of modules failed by participants

Participant 1 pointed that *I missed a lot of quizzes and failed some modules*. In the Figure 21 above, 51.9% of participants indicated that they failed less than 5 modules per semester while on the other hand Participant 2 mentioned that *I missed other assignments due to loss network connectivity of which led to failure of modules*. There were no participants who specified failure of all modules per semester or more than 5-10 modules. 48.1% of participants show that they failed modules between 1-4 while 5 participants out of 33 indicated that Covid-19 did not affect their studies negatively.

In the Figure 22 below, 21.2% of participants indicated that they failed modules due to lack of knowledge of using online platforms for learning while no participant indicated lack of study materials as a cause of failure. 21.2% of participants indicated that they experienced lack of understanding module content. Hence, 51.5% of participants showed that the stated challenges stated were not applicable to them while 6.1% of participants disclosed that all of the above challenges applied to them.

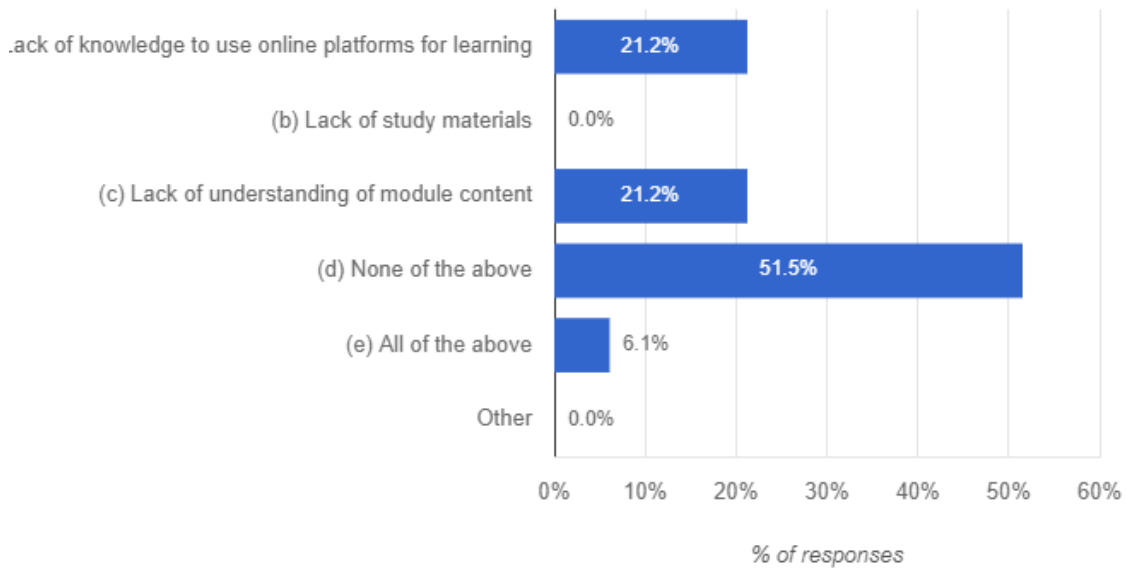


Figure 22: Representation of reasons for failing modules.

Participant 3 pointed out that *“I had a lot of work in a small period of time”*. Respondent 4 stated that *my performance dropped*. Participant 5 mentioned that *“we had less contact classes, classes would be cancelled, and there was a lot of work to do in a short space of time”*. 2 out of 33 respondents showed that they did not have enough time to study and do all the amount of work in a short space of time. Therefore, this led to failure of their modules. All respondents indicated the issue of not having access to data for online learning.

4 respondents out of 33 indicated that they were affected negatively by not having contact sessions with their lecturers. Participant 6 said that *“somehow somewhere I needed some face-to-face session for better understanding while”* Participant 7 provided that some subjects *“I was unable to learn on my own, they were so hard for me, I need help from the teacher”*. 3 participants out of 33 specified that they struggled with the use of technology for online learning. Participant 8 stated that *“the pandemic has forced many schools and universities to close or adopt online learning, which can be challenging for students who lack access to technology or reliable internet connection”*. Additionally, *“the pandemic has disrupted academic schedules, exams, and extracurricular activities. The mental health of students has also been negatively impacted due to the stress and uncertainty caused by the pandemic”*.

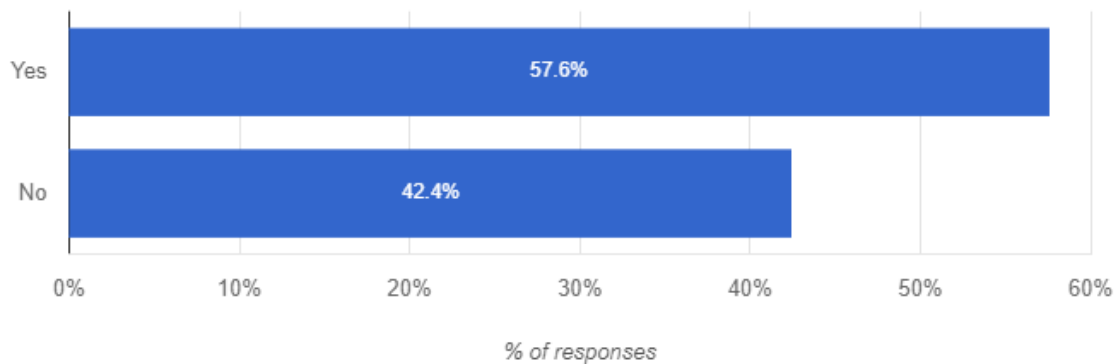


Figure 23: Representation of whether participants were challenged or not on using ICT for online pedagogy

In the figure 23 above, 57.6% of participants showed that they were challenged by the use of Information Communication Technology for online pedagogy while 42.4% of them indicated that they were not affected by it at all. Respondent 9 pointed out that finding information was difficult. Participant 10 pointed that *“I lost some focus on my studies sometimes because I was working under pressure with lot of assignment, sometimes I was skipping some classes because of network problem”*. 5 respondents out of 33 said they were challenged by network connectivity during online classes. Participant 11 also declared that *“I missed many online classes and it affected me negatively”*.

Participant 12 mentioned that *“I was forced to study while at home and I was not used to it”*. 2 respondents indicated that during face-to-face classes, they were forced to wear face masks all the time which became uncomfortable to them. Participant 13 stated that *“I had to move home for a quarantining period, and i was exposed to a realm of no network and my computer was slow”*. Participant 13 pointed out that *“my first year of furthering my studies was in 2021 when we were still struck by Covid-19 and everything had transcended to online learning, problems I encountered where sometimes network, noise as I was home - disturbing my study schedule”*. A single respondent out of 33 showed concerns of not being able to meet with classmates during the pandemic; whilst, Participant 14 pointed that *“it did not have a positive impact on my studies, because we had limited time or less time to have contact classes. In my studies I get a clear understanding by interacting with the teachers”*.

(e) Covid-19 affected participants in the following aspects of life

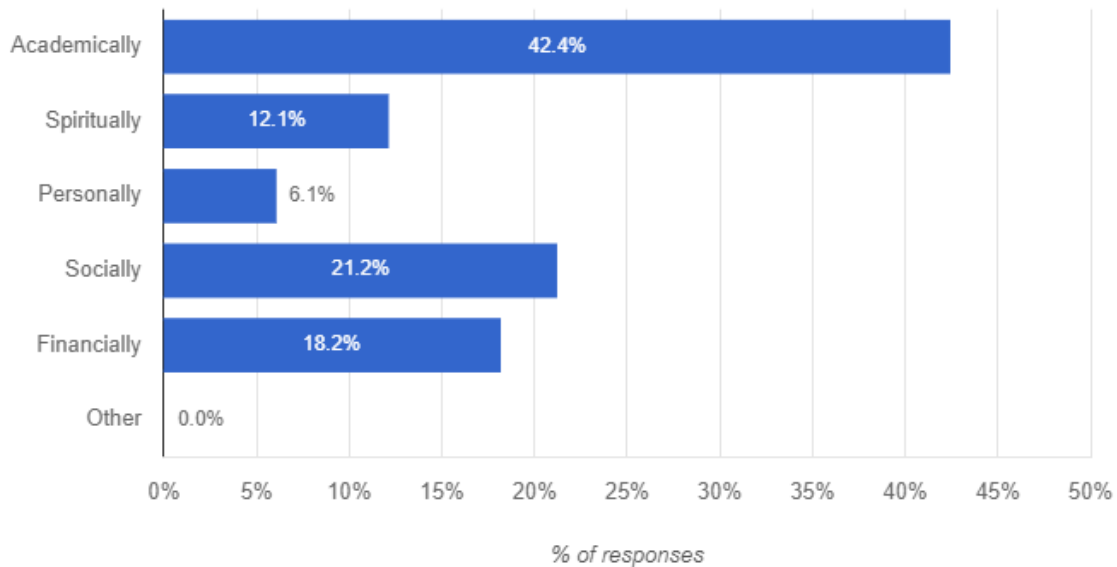


Figure 24: Representation on how Covid-19 affected participants

As indicated in the figure 24 above, 42.4% of participants were affected by Covid-19 academically. Participant 1 pointed that *“my academic marks dropped, not in a bad way but i did not get the marks I was looking forward to get”*. 4 participants out of 33 indicated that Covid-19 did not affect them academically. Participant 2 mentioned that *“I failed a module because that day I didn’t have network coverage in my village”*. 4 participants mentioned that they did not perform well in their academics. Participant 3 revealed that they missed assessments while participant 4 stated that *“Covid-19 led to the clCovid-19 caused disruption resulted in the cancellation of exams and classes. I personally had to adapt to remote learning, which presented challenges in terms of access to resources and face-to-face”*.

Participant 5 said that *“I was limited to come to campus library for academic purposes due to controlling the spread of the virus by staying quarantined”*. Participant 6 declared *“that Covid-19 has affected me academically in various ways. With the outbreak of the pandemic, many educational institutions shut down, causing disruptions in academic schedules, exams, and graduation ceremonies. The shift to online learning has been challenging for some students, especially those who lack access to technology or a suitable learning environment. Additionally, the pandemic has led to increased stress and mental health issues for students, which can*

negatively impact their academic performance. Finally, the pandemic has also impacted research and academic conferences, causing delays and cancellations in these events”.

Participant 7 said that *“all things were did online some other student did not have a smart phone to attend class online”*. Participant 8 stated that *“I was unable to do some consultations with the lectures when I don’t understand some assignment, because I have to wait to attend online class then ask him about that particular question. Online classes were difficult on my side because sometimes I was unable to hear the lecture when he is teaching”*. Participant 8 commented that *“I did not know any of my classmates and it was difficult to be able to communicate with them during contact classes”*. 20 participants showed that they were eager to meet with their peers and lecturers in person so their challenges can be addressed and participant 9 even emphasised this by commenting that *“some of the content of the BIKS module was difficult and also some lecturer was not available at all time to assist nor to respond own emails and text”*. However, a single participant mentioned that it was difficult to meet with a lecturer and seek for clarity.

12.1% of participants indicated that they were spiritually affected by Covid-19 lockdown. 18 participants out of 33 specified that they could not attend to church due to the Covid-19 lockdown regulations. 5 participants out of 33 mentioned that their spirituality was not affected by Covid-19 lockdown at all. Participant 1 said that *“more people were died”* while Participant 2 said that *I lost someone very close to me*. 2 participants indicated the pain of losing their family and friends due to Covid-19. Participant 2 pointed that *“I was unable to go to church or attend church service that I usually attend so it was hard for me to pray at home”*.

6.1% of the participants showed that they were personally affected by Covid-19. 4 participants mentioned that they were experiencing increased stress and anxiety. Participant 1 provided that *‘I had anxiety and depression because I was scared since a lot of people were dying’*. 6 participants indicated that they were not personally affected by Covid-19. Participant 2 revealed that *“wearing of masks all the time was a challenge”*. 33 participants indicated that travelling was prohibited. Participant 3 mentioned that *I got sick* while participant 4 stated that *“it affected me personally because I had symptoms of covid-19 and had to isolate myself from people, even at home”*.

As represented on figure 24, 21.2% of participants out of 33 were socially affected by the pandemic. Respondent 1 said that *“I social felt lonely because I couldn’t see some of my family members and friends”*. Through the implementation of the Covid-19 lockdown, Participant 2

commented that *“as a person who likes going out to parks and to restaurants, it did have a negative impact. I could not go out and enjoy myself with my family”*. Participant 3 pointed that *“I lost relationship with friends and family due to bad communication caused by Covid-19 lockdown”*.

Participant 4 elaborated that *“Covid-19 has had a significant impact on my social life. To prevent the spread of the virus, governments and health authorities have implemented various measures like social distancing, lockdowns, and restrictions on social gatherings. These measures have disrupted social life, causing isolation, loneliness, and mental health issues for many people. The pandemic has also affected social life by changing the way people interact with each other, with many social activities now taking place online. However, the pandemic has also led to an increased sense of community and solidarity as people come together to support each other during these challenging times”*. Participant 5 mentioned that *“it was difficult to make friends in the university”*.

18.2% of participants show that they were financially affected by the Covid-19 lockdown. Participant 1 declared that more people became unemployed while prices of food fluctuated. 8 out of 33 participants indicated that they were not financially affected by Covid-19 lockdown. Participant 2 pointed that *“it had a negative impact, because we had to buy medicines to prevent ourselves from getting the virus”*. Participant 3 mentioned that *“my dad lost his job because of Covid-19 so everything just went south”*.

25 participants indicated the scarcity of jobs and unstable sources of income. Participant 4 said *“that I didn't get my allowance from my parents as I was no longer going to school so it affected me negatively financially”*. However, Participant 5 commented that *“it did not, it actually helped me with saving since I couldn't do other activities”*. Participant 6 pointed that *“my parents were not paid for the first two months and it was difficult for us to survive”*. Participant 7 stated that *“it affected me a lot since I sometimes did not afford to buy data to attend some of my online classes, I did not attend some classes and in some of the modules I was academically left behind”*.

(f) Positive impact of Covid-19 on participant's studies

In figure 20 above, 24.2% of participants demonstrated that Covid-19 lockdown impacted on their studies positively. 3 participants confirmed that online learning was easier than contact learning. Participant 1 said that *I was able to reach out and access library via internet*. Participant 2 pointed that *“online learning helped me to take more responsibility for my learning schedules and develop effective time management skills. It helped me adapt my study routines to better suit my personal needs, leading to improved flexibility and self-discipline*. Participant 3 mentioned that *online pedagogy granted me the opportunity to ask questions from the lectures comfortably through online sessions”*.

4 participants out of 33 indicated that they learned to be independent during online learning. Participant 4 revealed that *“I was able to do research more effectively when I had assessments to complete and I did not feel the academic pressure at all because I would do my assessments at my own pace”*. Participant 5 stated that *“we were given all the materials and resources to learn during COVID-19, and the lectures held a zoom meeting often. We were even having an SI. But now we do things by our own”*.

Participant 6 provided that *“I became lazier”*. Participant 7 declared that *“I was studying online so I gain a lot of experience about laptop skill, and I was independent so I learn many tactics on how can I learn some slide before we attend lecture online”*. Participant 8 pointed that *“I did pass all my modules very well since wellbeing taught online rather than contact class”*. Participant 9 provided that *“the performances of my grades were higher, as I had a lot of support from different people such as mentors, parents and lecturers”*.

(g) Challenges faced by participants with the use of ICT for online learning

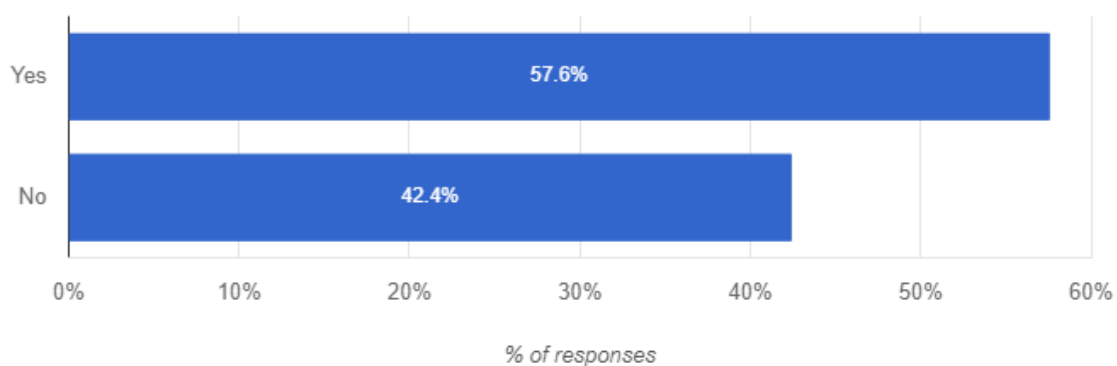


Figure 25: Representation of whether participants were challenged when using ICT for online learning

In the figure 25 above, 57.6% of participants out of 33 responded that they had challenges with the use of ICT for online learning. 4 participants mentioned that they had no devices such as laptop and phones to participate in an online learning. Participant 1 stated that *“I had to borrow devices from those who have just so I can attend an online session”*. Participant 2 stated that *“Zoom meeting platform would kick us out of the session”*. Participant 3 declared that *“I did not know how to use my organization registration such Microsoft account where you sign using a school account”*.

Participant 4 pointed that *“I experienced a lot of challenges with Microsoft teams, I have never utilized it before hence it was difficult for me to use it, and we did not get any guidance or support from the university or lectures on how to utilize Ms Teams”*. 11 participants indicated that they had challenges with network connectivity and access to data. Lack of knowledge of using technology was a challenge as indicated by 13 participants. Load shedding was a problem as it took away electricity and network connectivity as stated by 25 participants. Participant 5 alluded that *“I experienced countless distractions since I was using my phone sometimes laptop, so I was able to see messages dropping in my social media as I would spend lots of time in social media than in class and end up not understanding module content”*.

Participant 6 declared that *“I faced connectivity issues, as well as not being able to communicate my learning frustrations directly with the lecturer, for an example asking a question and not getting answered accordingly and the lecturer being unable to understand the point of view or context of my question”*. Participant 7 concluded that *“the challenges I faced were load shedding, connection network problems and data fluctuations. Another problem was being forced by Covid-19 circumstances to own a laptop due to online classes and adapting to online platforms”*. The issue of network connectivity was affected by environment that the students came from.

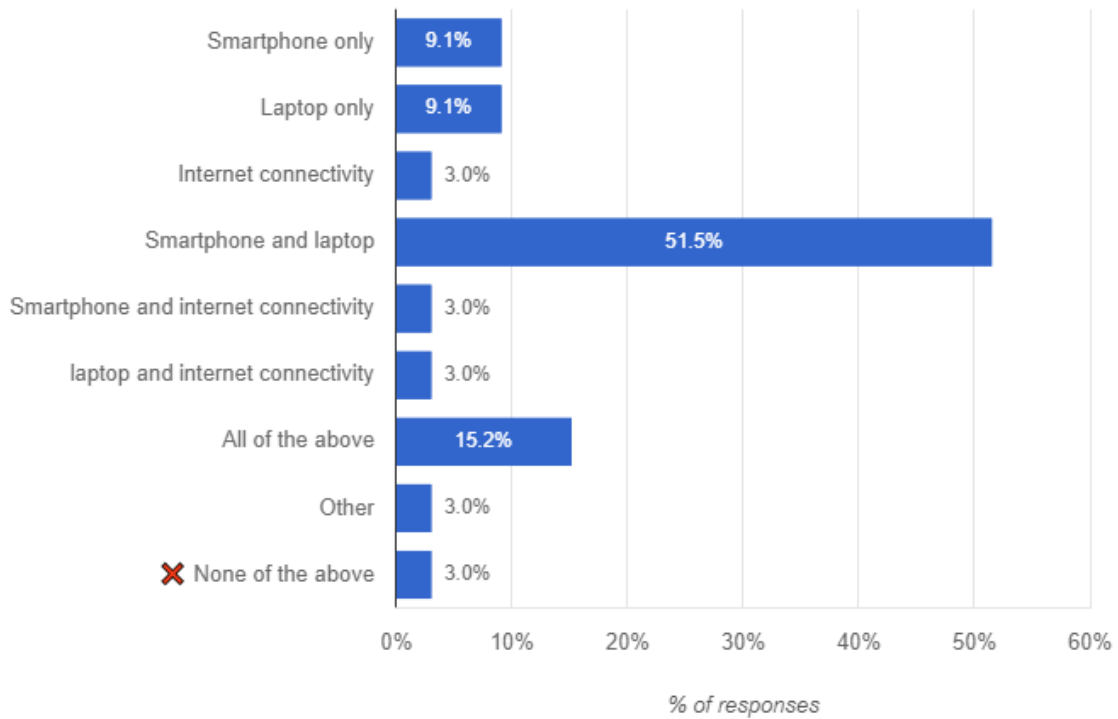


Figure 26: Representation of devices participants had access to for online pedagogy

In the figure 26 above, 9.1% of participants out of 33 had access to smart phones only, 9.1% had access to laptops and 3% were affected by network connectivity. 51.5% of participants had access to both smart phone and laptop while 3% of participants had access to network connectivity, laptop and internet connectivity. 15.2% of participant had access to network connectivity, smartphone, laptop and network connectivity while 3% had nothing at all. 7 participants indicated that they had financial problems and could not afford laptops, or data and smartphones for online learning. Yet, the university provided students with data and laptops depending on their needs.

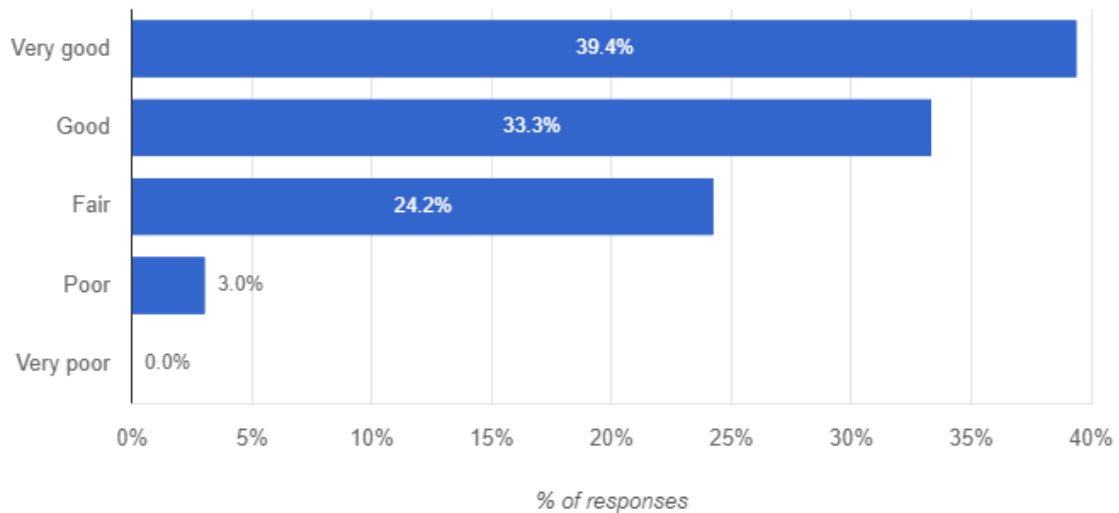


Figure 27: Percentage of participants with regard to their level of skills and knowledge of using devices for online learning

In figure 27 above, 39.4% of participants had advanced skills and knowledge of using their devices for successful online learning while on the other hand, 24.2% were moderate in terms of knowing how to use their devices. Nevertheless, 3% of participants out of 33 did not have the knowledge and skills on how to use their devices for online learning.

In the figure 28 below, 72.7% of participants confirmed that they were using WhatsApp communication platform for online learning while 3% confirmed the use of google mail accounts for communication. 15.2% indicated the use of Zoom meetings while 9.1% showed that they used Microsoft teams for video conferencing online sessions. There is no participant who specified the use of Facebook as a platform of communication for online learning.

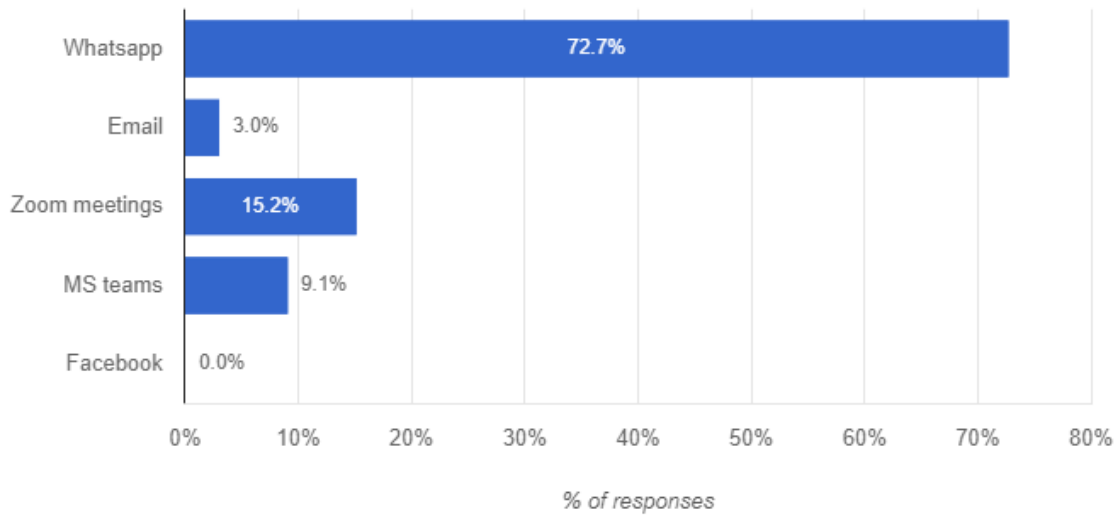


Figure 28: Representation of platforms used for online learning

On the below figure 29, 60.6% of participants out of 33 mentioned that some of the online platforms they used were new to them whilst 39.4% of participants said that they were familiar with the platforms. All participants confirmed the use of *efundi* platform for online learning as part of communication with the lecturer.

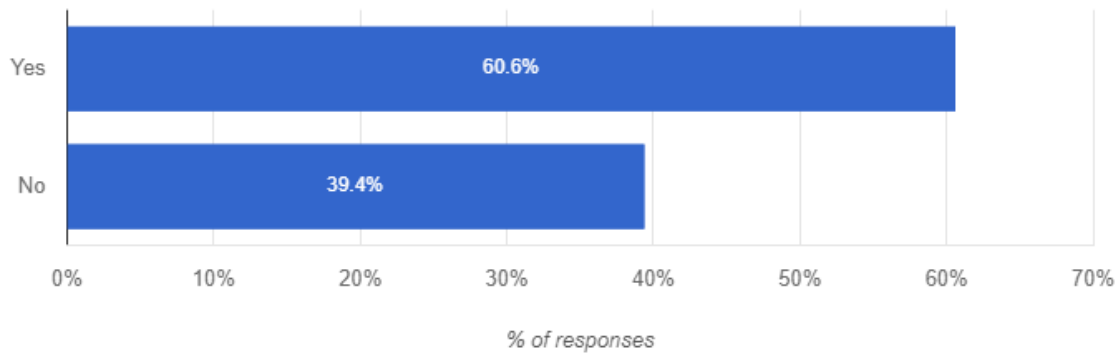


Figure 29: Representation of whether participant were familiar with online platforms they used or not

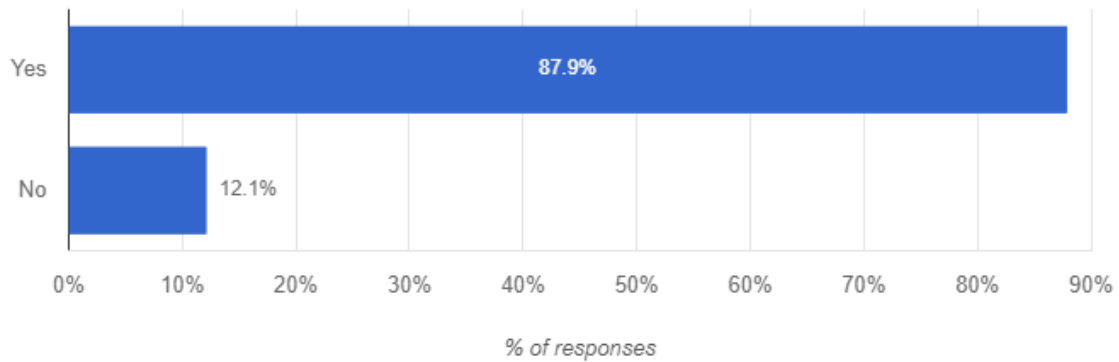


Figure 30: Representation of whether participants received support to overcome their online pedagogical challenges

In the representation above, 87.9% of participants out of 33 stated that they received outstanding an amount of support they needed to overcome the challenges they experienced with online pedagogy while on the other hand, 12.1% of participants mentioned that they did not receive any kind of support to overcome their challenges. In the figure 31 below, 9.1% of participants out of 33 acknowledged the support the university offered to them to overcome their pedagogical challenges in an online environment while 18.2% of participants were supported by lecturers. Mentors, tutors and student instructors offered support as 42.4% of participants confirmed that. 15.2% of participants were supported by friends while 9.1% of participants confirmed the amount of support they got from their parents. 6.1% of participants indicated that they got the support from other people and institutions.

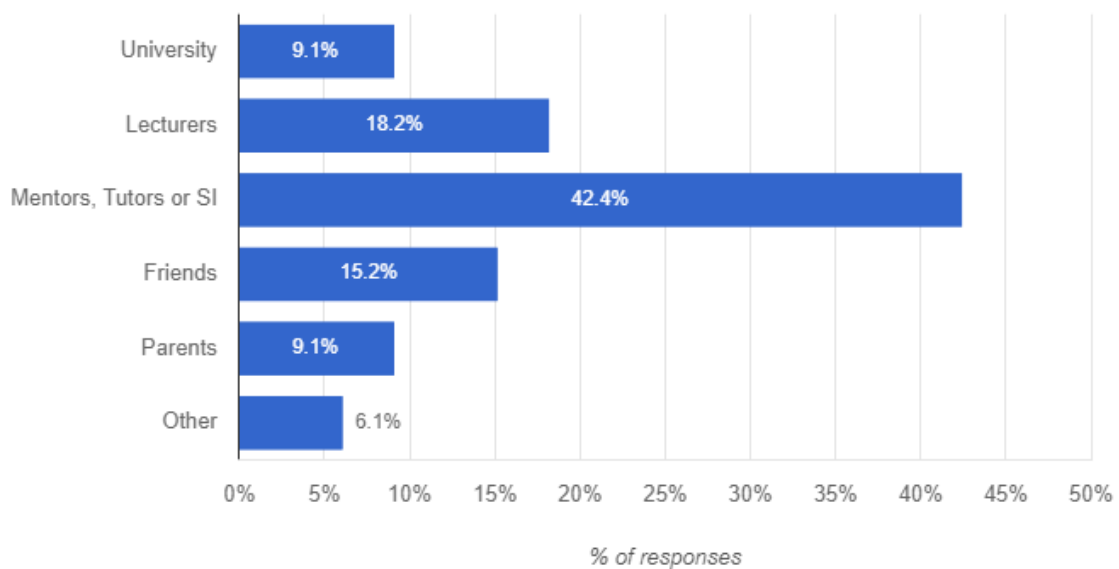


Figure 31: Representation of support structure received by participants to overcome their challenges with online pedagogy

(h) Benefits of using ICTs for online learning

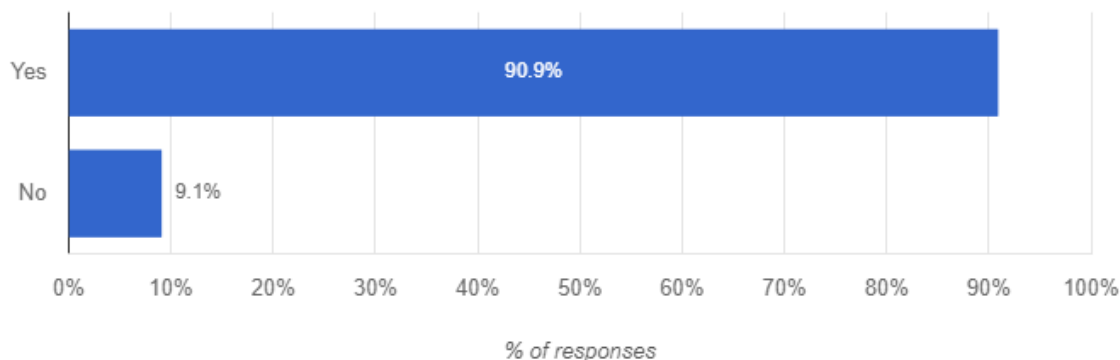


Figure 32: Representation of whether participant benefited from online learning

As indicated in the figure 32 above, 90.9% of participants indicated that they benefited from the use of online platforms including ICTs for online learning while 9.1% of participants show that they did not benefit from the use of online platforms and ICTs for online learning. In the figure 33 below, 21.2% of participants out of 33 indicated that they were challenged by online pedagogy more than they benefited from it. Participant 1 said that *“time management skills were improved by online learning by having a flexible time table schedule”*. 27 participants confirmed that they got higher marks and passed their modules well during online learning more than face-to-face learning.

60.6% of participants out of 33 confirmed that they benefited from the online pedagogy more than they were challenged by it while 18.2% of participants indicated that they were new to online pedagogy. Participant 2 mentioned that *“I benefitted in the sense that I was able to listen to the online recordings many times and was able to better understand context each time”*. Participant 3 commented that *“gaining the necessary computer skills, adapting to the environment was very much beneficial”*. Participant 4 mentioned that *“it made me socialize/text with other students as we would be in the same groups or when I didn't understand I would ask another student for clarity since most of us study in the AMs and the lecture is not available during that time”*.

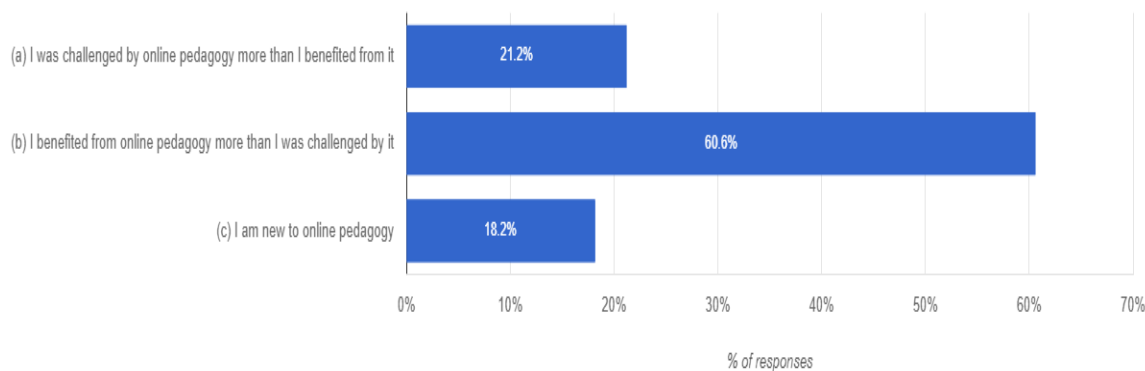


Figure 33: Representation on pedagogical benefit or challenge by participants

The representation on figure 34 below indicates that 27.3% of participants out of 33 strongly agreed with satisfaction with online pedagogy while 57.6% just agreed. 9.1% of participants disagreed with the satisfaction they had with online pedagogy in 2022 while 6.1% strongly disagreed. The unsatisfactory of students with any pedagogy actively implemented have a relationship with how they got challenged and benefited from it.

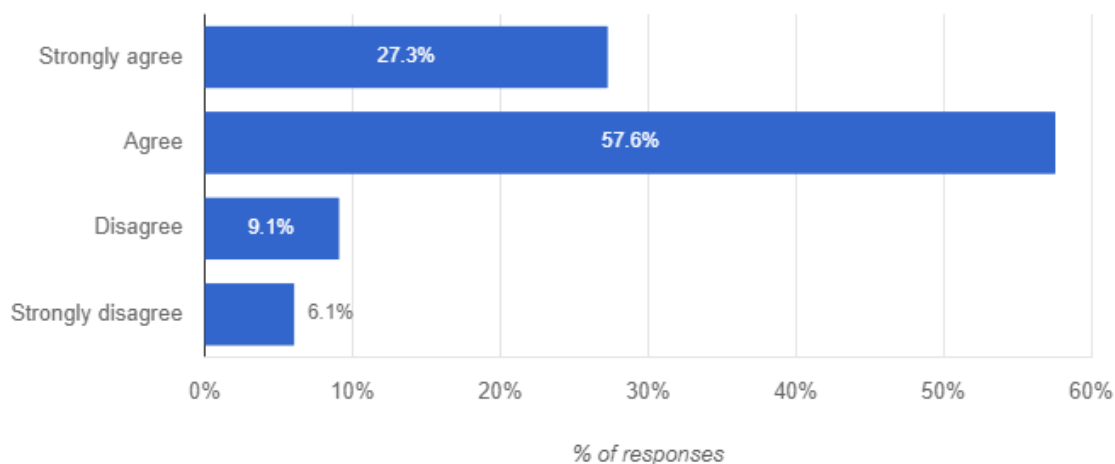


Figure 34: Representation of satisfaction participants had with online pedagogy

In the figure 35 below, 54.5% of participants out of 33 maintained that as they benefited from using ICT online learning, therefore they prefer it to be permanently part of the curriculum in 2024 academic year. 33.3% of participants indicated that they do not prefer online learning as they were challenged by the change of the pedagogy to online learning while on the other hand,

6.1% of participants are not sure about implementation of online pedagogy to be primarily part of the curriculum.

12 Participants out of 33 confirmed that they want hybrid learning to be implemented. Participant 1 said that *“hybrid learning will do for those who already adapted to online will perform better in the online assessments for those who adapt easily will also do better on face-to-face, everyone should be given a platform they can utilize to perform better”*. Participant 2 argued that *“face to face learning motivates you to not forget your goals and to fully experience being a tertiary level student”*.

Participant 3 prefer face to face learning, *“because everyone is given an opportunity to be encourage than online learning as students just search on the internet what needs to be done and just copy and paste”*. Participant 4 also preferred face-to-face learning because, *“lecturers can see if their students understand what they are saying, the chances of students missing something that the Lecturer said are low, sit-down tests gives us an opportunity to see if we really understand the content whereas in the online multiple-choice test, we would just look for key works”*.

Participant 5 mentioned that *“I prefer face to face especially for consultations when you have difficulties with the module and you can directly go to the lecturer unlike during online learning when you cannot go check the lecturer in their office and you have to send an email first to book an appointment for consultation”*. Participant 6 alluded that *“face to face learning is more interactive and gives students a better chance at being practical and advanced in the workplace. It helps with communication skills as well as working with others”*. Participant 7 concluded that *“face to face class is more appropriate because there is engagement, interactive learning, flip classes and issues are directed immediately”*.

Participant 8 commented that *“I believe hybrid learning would give us 50/50 chance to get good marks because some students prefer the contact teaching because for example, they do not have good connectivity or the devices needed to complete task. For example, laptop and others online teaching because they cannot balance attending every class and self-study”*. Participant 9 argued that *“strict face-to-face is what we need, since online learning encourage lack of interest and lack of accountability in our studies but with face-to-face it is easier for us to engage, get challenges and improve not only our communication skills but our confidence and team work skills since we have to work with others and we are able to actually hear and learn their*

perspective in life. Face to face for me does not give us the platform to grow out of our comfort zone and explore other interests”.

Participant 10 confirmed that *“hybrid learning should be implemented in 2023 academic year due to Artificial Intelligence improvement, blended learning would be instrumental in adapting to the changing world environments”*. Participant 11 stated that students should be given a learning option to make their choices on what they understand better as a method of teaching and learning. Participant 12 was concerned about the challenges faced by students during online learning on how the university will ensure that hybrid learning is well implemented for the benefit of students than the university.

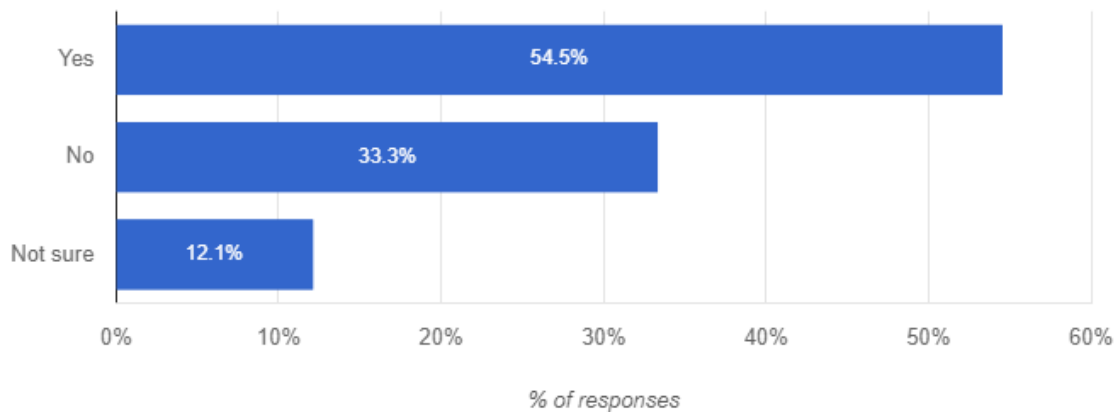


Figure 35: Representation of online pedagogy to be permanently part of the curriculum

(i) Challenges of moving back to face-to-face pedagogy

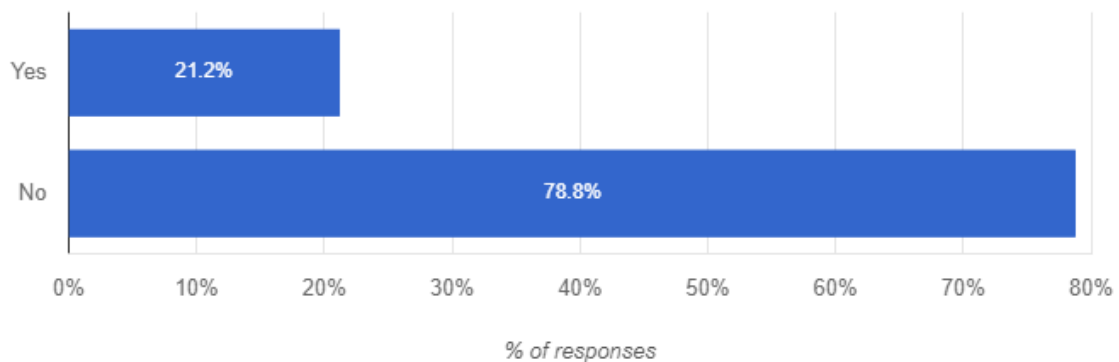


Figure 36: Representation of challenges faced during face-to-face pedagogy

In the figure 36 above, 21.2% of participants out of 33 confirmed that they were experiencing challenges while the pedagogy shifted from online back to face-to-face. Consequently, 78.8% noted that they did not experience any challenges when the pedagogy shifted from online learning back to face-to-face. Respondent 1 provided that transport from respective residences to and from university was a challenge to attend face-to-face classes during Covid-19. Yet, 22 participants out of 33 mentioned that they did not encounter any challenges at all as confirmed during focus group interviews.

Participant 2 said *“that Lectures forgetting to cancel their classes when they’re not around or coming was a concern to me”*. Participant 3 disclosed that *“I stay off campus, which means I walk to campus and sometimes I’m late and the lecturer cannot allow you in class and you miss a lot of work”*. Participant 4 mentioned the intimidation lecturers got them into so they were shy to answer questions in a face-to-face session.

Participant 5 stated that *“sometimes I did not understand the lecturer”*. There was lack of communication between students and lecturers as stated by Participant 6. Participant 7 mentioned that *“lecturer is not being lenient to the student and some are extremely impatient to the students”*. Participant 8 alluded that *“sometimes there are no classes or classes might be cancelled due to certain reasons, leading to students falling behind with their school work. At least if there were online classes to cover what should have been done in class”*.

20 participants mentioned the challenges faced during the Covid-19 pandemic/lockdown with face-to-face pedagogy included lack of interaction with lecturers. Participant 9 said that *“there was very limited face to face interactions having to wear masks”*. 19 participants alluded that there was limited face to face interactions, difficulty adjusting from online to face to face classes while taking precautions and limited contact sessions.

(j) Benefits of moving back to face-to-face pedagogy

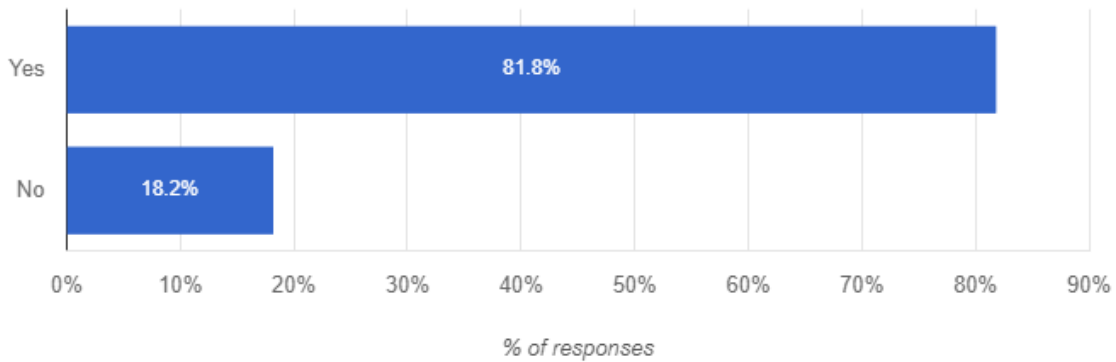


Figure 37: Representation of benefit from the change of pedagogy from online back to face-to-face

In the figure 37 above, 81.8% of participants mentioned that they benefited from the change of pedagogy from online back to face-to-face while on the other hand 18.2% of participants declared that they did not benefit from the pedagogical transition. Participant 1 revealed that *“I had better understand of the content during lectures because there were no cuts due to unstable Wi-Fi/network being able to ask lectures questions & get immediate answers because sometimes it's hard to get a hold of lectures when you are going through the work by yourself”*.

33 participants confirmed that they could get access to lecturers and communicate face-to-face with them when they needed clarity on questions. Participant 2 elaborated that *“there is more interaction and it is better as I am able to discuss in depth with the lecturer and my class mates, this gives me a better chance when writing an exam or test as I have more practical understanding of the questions that might be asked in exam and assignments”*.

(k) Discussion of findings

North-West University Bachelor of Indigenous Knowledge Systems students in various levels of academics showed varying perceptions and learning experiences on the change of pedagogies, opportunities, and challenges on each pedagogy during Covid-19 lockdown through focus group interviews and survey completion. Demographic information of participants represented in figure 9 of this study shows that students opened the survey but did not complete are more than the number of students who completed the survey.

This could be caused by network connectivity, loss of interest in participating in the study, students who do not meet the criteria to answer the questions as they were not studying during the period of Covid-19 pandemic. Hence, them accessing the survey because as soon as you enter into the link, the survey platform recorded the action.

Among 33 participants who managed to complete the survey, there are more females than males as demonstrated in figure 12. In figure 14, among 33 participants, more second year students participated in this study than any others who are in other varying academic year levels. The experiences of participants in compliance with their academic levels and exposure to the Covid-19 lockdown while studying contributed to the ability to answer the research questions.

As indicated in figure 15, 16 out of 33 of participants mentioned that they applied for BIKS qualification as their first choice while 15 of them indicated that they chose the qualification as their second opportunity and 2 of them did not want to take a gap year. Therefore, this seemed to have a direct impact on the success of students depending on the amount of passion they had regarding the qualification and its opportunities.

Covid-19 has an impact on the lives of students in different ways as indicated in the findings. This includes both the positive and negative impact on them. Tarkar (2020) posit that universities shut down affected the learning experiences of students due to Covid-19 pandemic. This does not rule out of the fact that, as indicated on figure 18, 25 participants out of 33 demonstrated that Covid-19 lockdown affected them negatively more than positively.

As the method of teaching and learning transitioned from face-to-face to online, students began to find it difficult to adapt to the changes due to a lack of study materials accessible in the library, understanding module content, being unable to socialize and travel to different areas. Nevertheless, some of the challenges with using ICTs for online learning were lack of data

bundles and devices, not having the ability to use online applications and platforms for online learning and errors on network connections.

All the challenges faced by students depend on the type of country students are from with regard to the growth and advancement of technology. Muhammad (2020) argues that students in Pakistani experienced issues of access to internet due to affordability of data. Emphasis of online learning challenges was posed on heavy workload and access to technology (Adedoyin & Soykan, 2020).

As much as Covid-19 lockdown challenged them, there are those who testified that they benefited from the transition of pedagogy from face-to-face to online. Some of the benefits included, independence in studying, passing modules with distinctions, ability to communicate online even when could not physically interact, gained skills and knowledge on how to use devices, applications and online tools for online learning, and problem-solving skills.

Kee (2021) mentioned that students indicated signs of fear and anxiety as a psychological impact while others reported the acceptance of online learning and adapting to it. The Covid-19 lockdown did not only affect students academically as it also had a negative impact on their social, spiritual, financial and personal lives. Hence, authors such as Mayoob (2020), Yusuf and Ahmad (2020) and others indicated only the academic impact of Covid-19 based on the transition of pedagogies from face-to-face to online.

It is therefore evident that challenges faced by students in different institutions of higher learning may differ or be similar depending on their circumstances. When students moved from online back to face-to-face pedagogy due to controlled and contained spread of Covid-19, they still faced challenges of which included cancellation of face-to-face classes due to unforeseen circumstances and load of work increased including formative assessments commencement of which compromises the time for studying and personal duties as indicated by 7 participants out of 33.

Some of the benefits of moving back from online to face-to-face learning were, ability to access study materials, gained better understanding of module contents and ability to interact with others for better possible solutions to problems. Therefore, the results proved that students exposed to varying pedagogies have their own challenges and benefits. Singh *et al.* (2021)

alluded that hybrid learning is now implemented because of online learning experiences and lessons happened during Covid-19 in higher education.

5.1.2 Findings from University of Venda, BIKS students

(a) Reflection of participation in this study

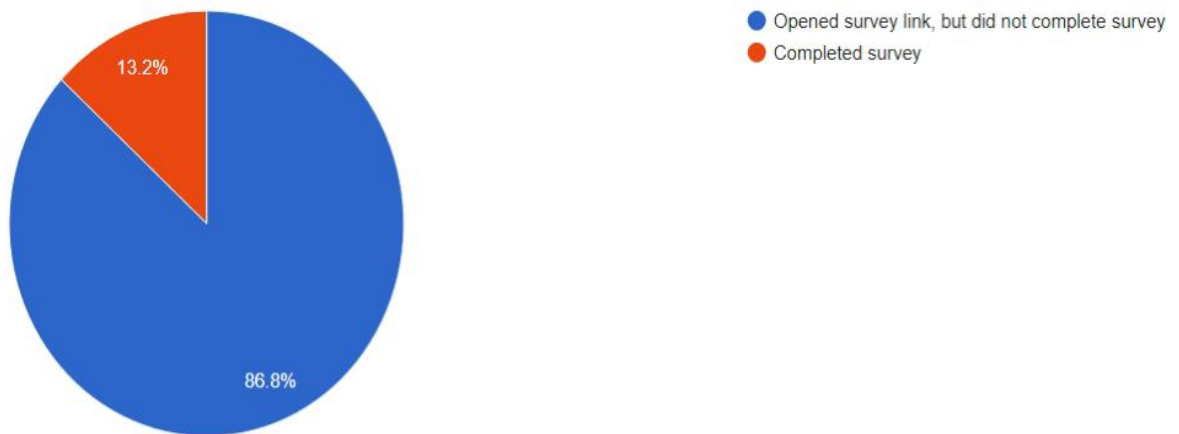


Figure 38: Pie chart of the number of students who completed and did not complete the survey

114 BIKS students from University of Venda opened the survey through the link sent by the researcher. In the figure 38 above, 13.2% of the target population which is 15 participants managed to complete the survey while 86.8% or 99 of the participants out of 114 students from the target population opened the survey but did not complete the survey. On the below figure 39, 10 participants completed the survey while their location points at Limpopo province around Thohoyandou and Acomhoek while 5 were in Gauteng in Pretoria and Lawley.



Figure 39: Representation of location of participants when they completed the survey questionnaires (screenshot taken by Kapsell Kwena Semanya on Conjointly)

(b) Demographic information of participants

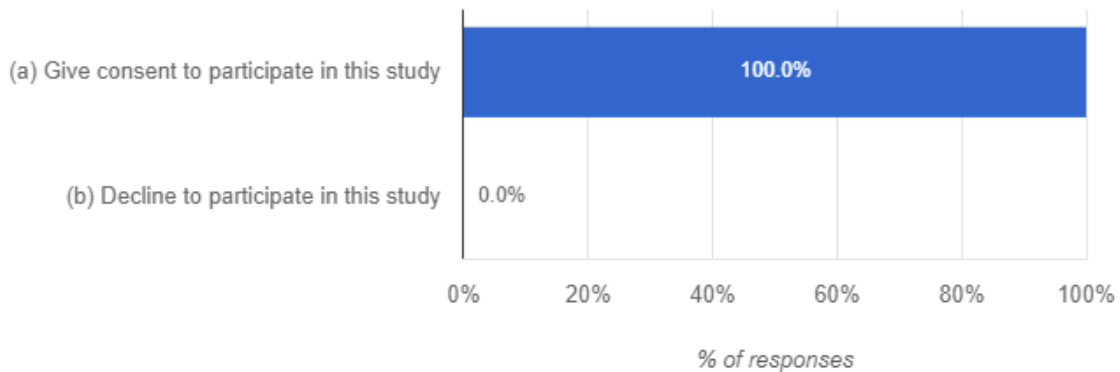


Figure 40: Representation of consent given to researcher by participants to complete the survey

In the figure 40 above, it is represented that 15 participants who completed the survey gave consent to the researcher to complete the survey. There is no single participant who declined to participate in this study out of 15 participants. In the figure 41 below, 13.3% of participants are from Bapedi tribe as they chose Sepedi as their mother tongue while 66.7% of participants are from Ba-Venda tribe. There are no Sesotho, Setswana, IsiZulu, Swati, IsiNdebele, English,

Afrikaans or any other language speaking students among participants. 13.3% of participants are TshiTsonga speaking tribe while 6.7% are Xhosa speaking participants.

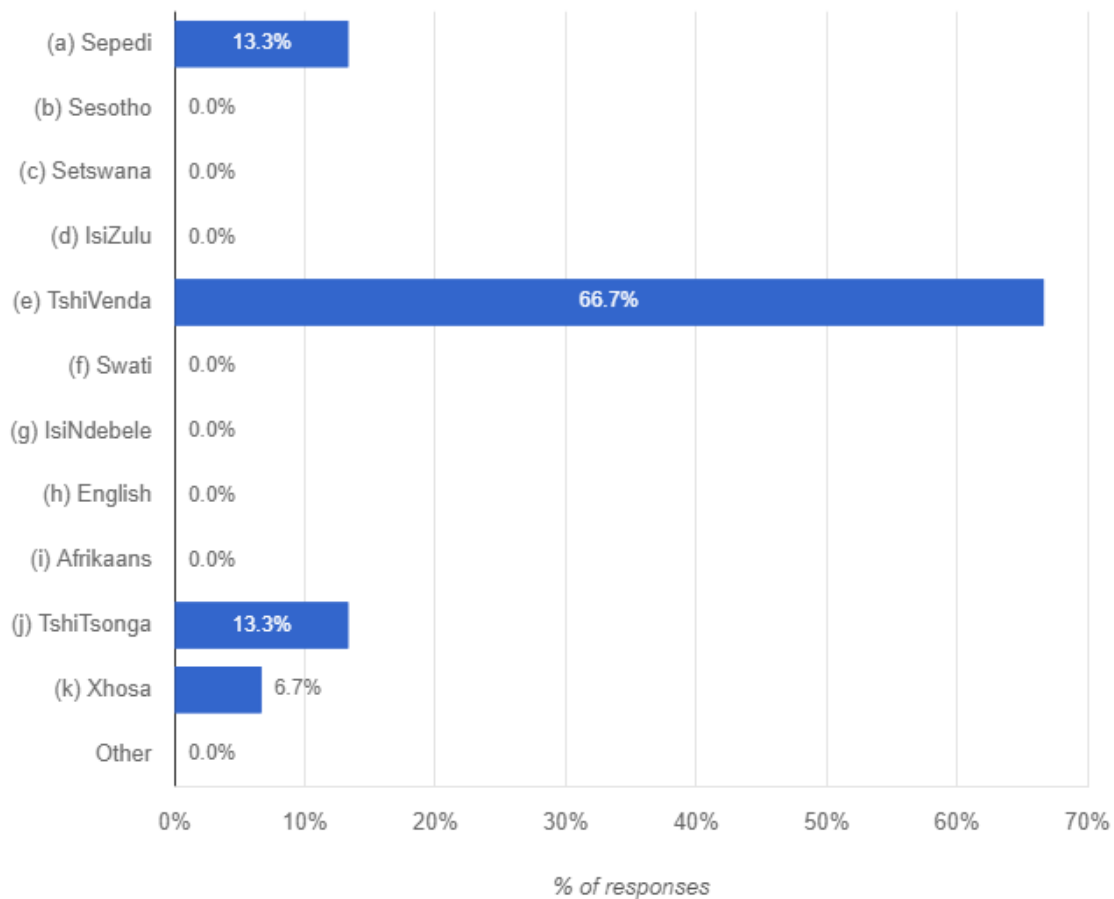


Figure 41: Representation of home languages of participants

In the below figure 42, 60% of participants are in the ages between 18 to 22 years while 33.3% of them are aged between the 23-27 years. There are no participants aged over 30 years of age. 6.7% of participants are aged between 28-30 years of age. In figure 43 below, in terms of gender of participants, 40% of them are males while 60% of them are females.

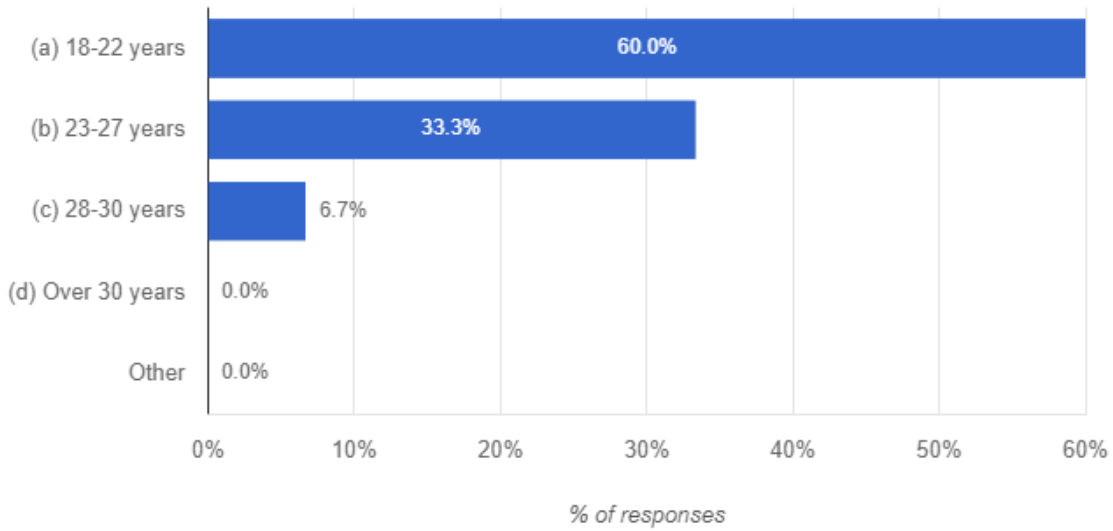


Figure 42: Representation of ages of participants

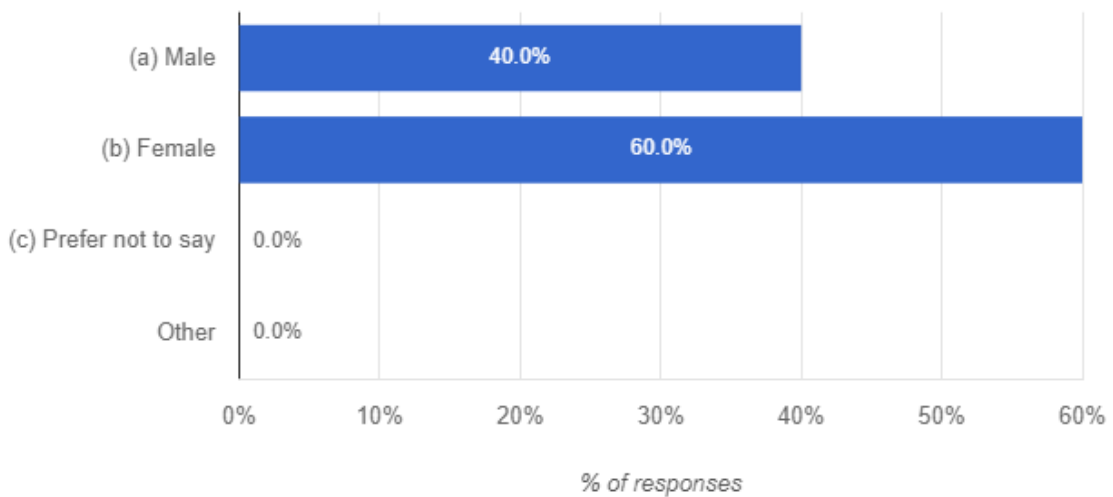


Figure 43: Representation of gender of participants

In the figure 44 below, 86.7% of participants are from Limpopo province while 6.7% of them are from Mpumalanga out of 33 of participants. Moreover, 6.7% of participants are from Eastern Cape while on the other hand, none of the participants indicated their location in any other province found in South Africa besides the above-mentioned. In figure 45 below, participants confirmed that all of them are studying BIKS in the University of Venda.

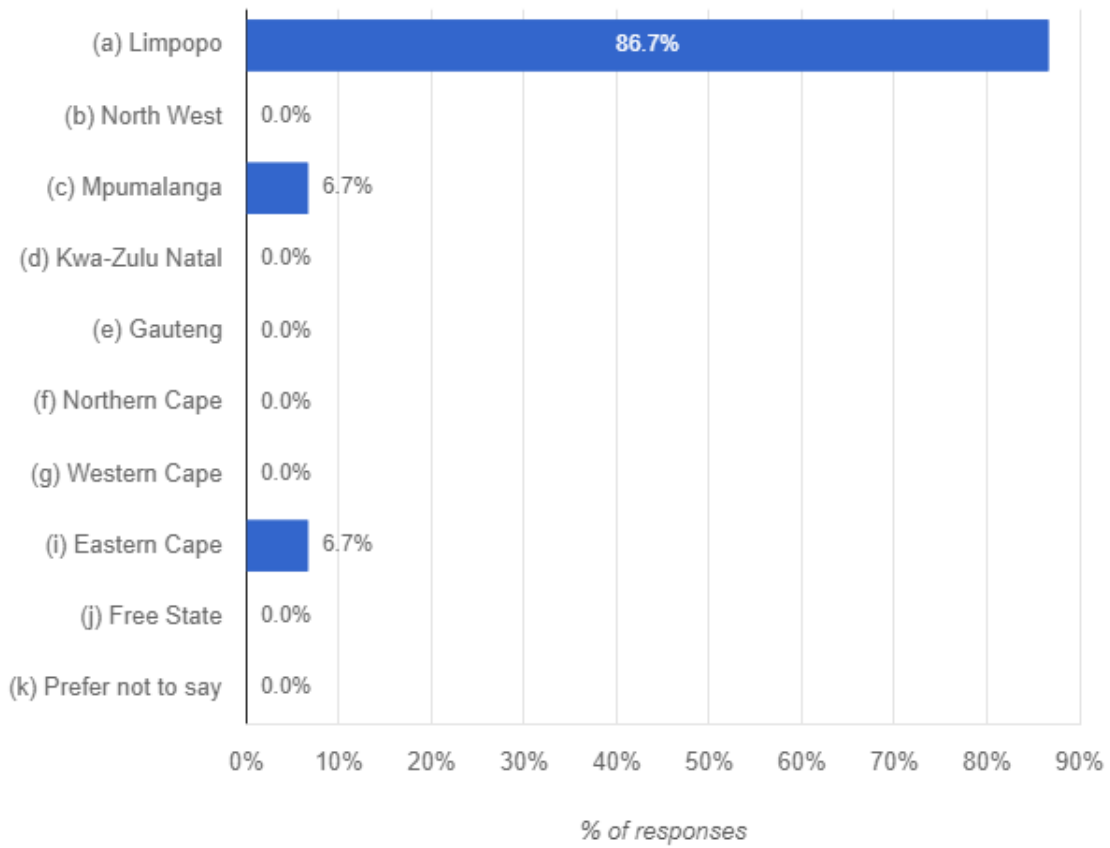


Figure 44: Representation of the location of participants

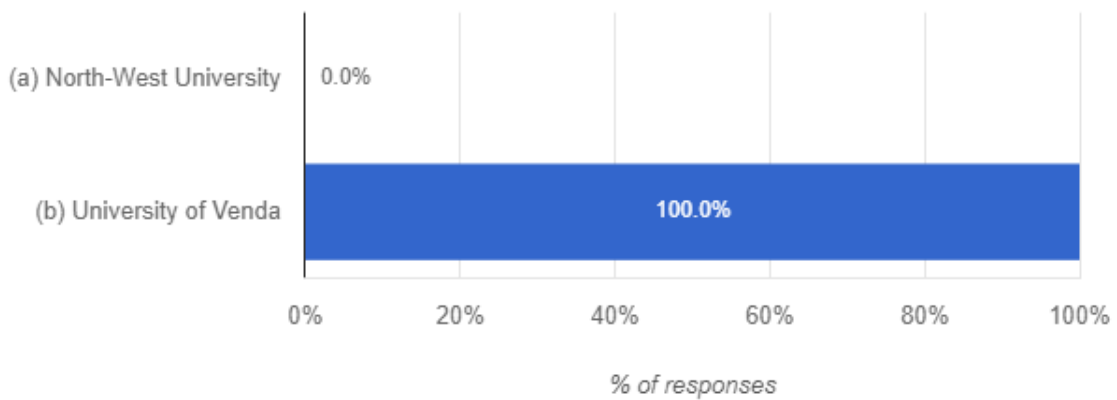


Figure 45: Representation of University participants are studying at

93.3 % of participants out of 33 confirmed that they are studying Bachelor of Indigenous Knowledge Systems full-time while 6.7% mentioned that they study the course part-time as represented on figure 45 below. Figure 47 below represents that 26.7% among 33 participants are first year students while 6.7% are second year students. 26.7% of participants show that they are third year students while 40% indicated that they are final or fourth year students.

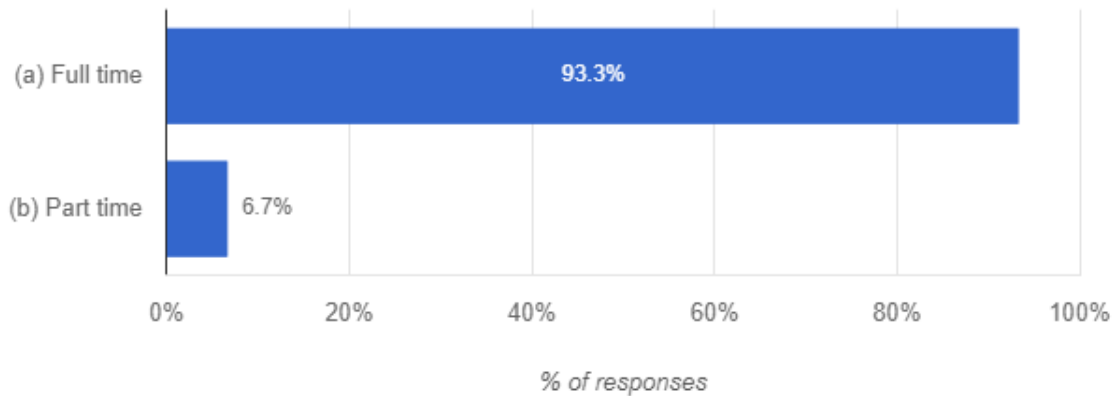


Figure 46: Representation of method of attendance of participants to the course

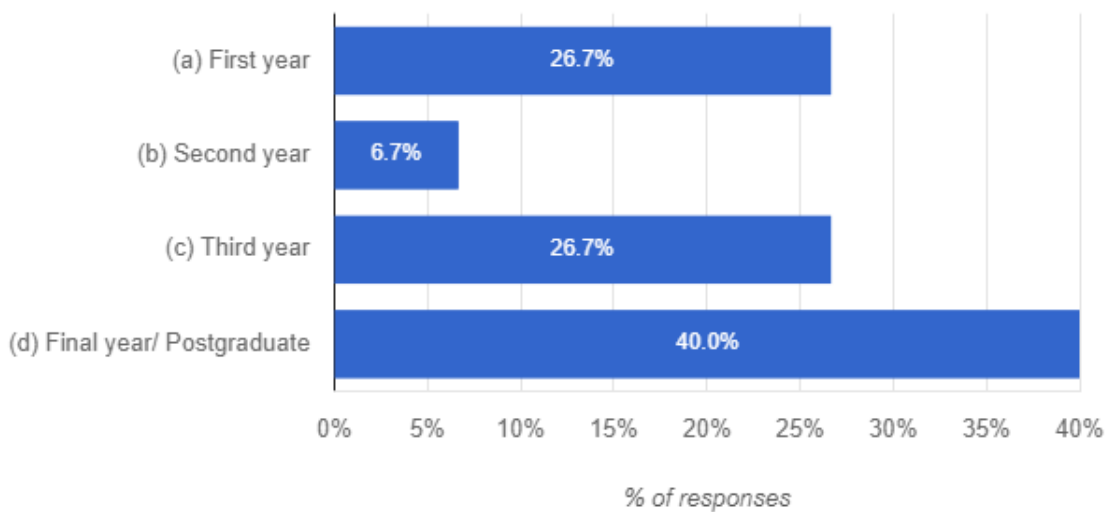


Figure 47: Representation of Level of years of participants

(c) The positive impact of Covid-19 on BIKS students

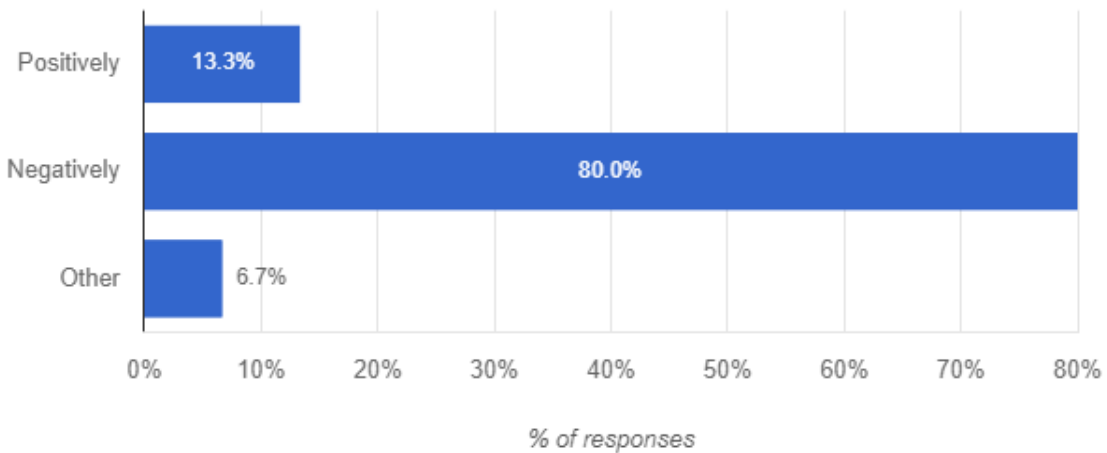


Figure 48: Representation of impact of Covid-19 on BIKS students

It is evident that Covid-19 had both positive and negative impacts on the students' studies, with face-to-face classes on pause and digital learning systems being introduced in the education system. The representation above shows that 13.3% out of 15 of participants were positively impacted by Covid-19 lockdown on their study. Respondent 1 said that *"Online education provided a great opportunity for self-study; I was able to analyse more effectively what I was being taught"*. Respondent 2 commented that *"I am the student who loves to do things online, so it was favourable for me during covid-19. It impacted my studies positively as slides were provided online within reasonable amount of time and influenced me to have more time to study"*.

Respondent 3 supported that *"I got to learn independently the most. I was also exposed to learning management systems which was the curve I think our department or program has been reluctant to take"*. Respondent 4 noted that *"I get to know about the use of internet and apps that can be used to make learning in easy way than face to face without waste of time. I get time to focus on studying and researching the topics that I didn't understand"*. However, 5 participants out of 15 argued that Covid-19 did not neutralize their learning experience in a positive way. 10 participants indicated the level of independence that they were on when they studied in an online environment.

Respondent 5 mentioned that “we got introduced to the use of technology and also increased the access to educational resources”. Respondent 6 alluded that “I had to study using online platforms which became an advantage to me as I learnt how to use online platforms”. Respondent 7 added that “I managed to learn online and master writing on a desktop”. Respondent 8 pointed that “I get to be more familiar with online learning, learn a lot through online learning and the classes are always there on terms which helps me to access them whenever am not understanding anything”.

Respondent 9 declared that “I adaptation of online learning. Helped us to be more used to technology because we were using teams. It increases research about awareness about the pandemic. Sharing of resources and knowledge on online platforms”. Respondent 10 concluded that “online learning introduced me to blended method of learning which I learned a lot about online classes using zoom meetings and other methods”.

(d) Negative impact of Covid-19 on participant’s studies

In the figure 48, it is represented that 80% out of 15 participants were negatively affected by the lockdown resulting from the spread of Covid-19. Respondent 1 said that “the absence of face-to-face engagements with the lectures meant that there was a minimum chance of getting clarification on some of the things. Just to add, IKS is better when taught physically than online. Therefore, Covid-19, resulted in me having to teach myself most of the things”. A single participant out of 15 confirmed that Covid-19 did not affect studies negatively as the participant fully enjoyed the benefits of the change of pedagogy from face-to-face to online.

2 participants out of 15 confirmed the issue of network connectivity to be able to successfully be part of the online learning. Respondent 1 pointed that “as covid-19 was stressful and threatening in every individual. That's the only thing I can point that it was negatively impacting my studies”. Respondent 2 noted that “I didn't have access to library books”. Respondent 3 said that “the introduction of e-Learning was new to me so it takes time for me to get terms with it and I was living in rural area where there is a poor network and the expensive of data because by the time Covid-19 spread the university close and they could not provide data for students”. However, a single participant denoted that she had to pay her peer to buy data and connect her since she did not have access to internet.

Respondent 4 mentioned that *“I was used to learn face to face and that was my best ways of learning whereby I am able to understand what I am learning and it is effective to learn face to face than online because of the unstable network which sometimes led you to missing some other classes online, so COVID-19 brought a real positive impact”*. Respondent 5 alluded that *“physical classes were disrupted causing lectures and students to adapt to online teaching and learning and students were facing technical challenges of network connectivity”*.

10 out of 15 participants showed to have been conflicted by understanding topics discussed in an online mode. Respondent 6 declared that *“I had to do school activities through online platforms and it was not easy for me as I did not know much about online platforms and I used to experience poor network which became a problem on my studies”*. Hence, one of the participants added that navigation through Zoom meeting and Microsoft teams was a difficulty when attending online classes.

1 out of 15 participants indicated to have not being negatively affected by Covid-19 lockdown in their studies. Respondent 7 commented that *“with online learning, I was so disadvantaged because of network problems and load shedding which resulting missing my classes and online tests due to network connectivity”*. Respondent 8 indicated the interruption of education as they closed and not writing exams while challenged with access to devices and data. Moreover, respondent 9 indicated that *“I was unable to study at home alone as I was used to study in group”*.

(e) Covid-19 affected participants in the following aspects of life

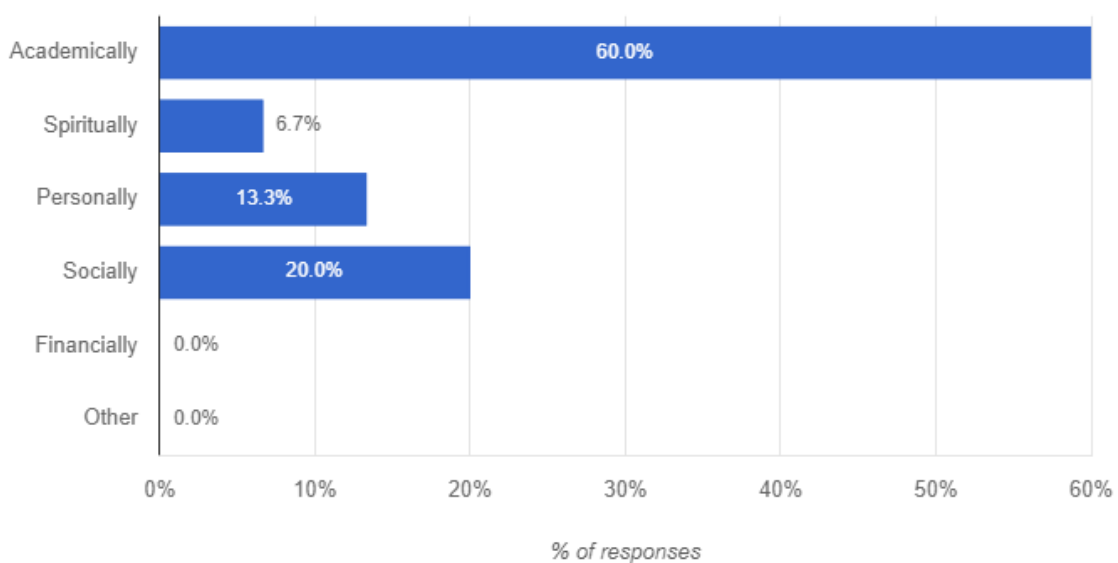


Figure 49: Representation of impact of Covid-19 on aspects of lives of participants

60% of participants out of 15 mentioned that they were academically affected by Covid-19 lockdown. In a nutshell, since Covid-19 exposed respondents to online learning, it caused delays and cancelations of exams and academic events, as well as difficulties in completing schoolwork due to poor internet connectivity and lack of physical spaces to study. This led to stress, mental health issues, depression and anxiety, and many respondents failing some modules. However, 1 participant out of 15 said Covid-19 did not affect them academically.

6.7% of participants revealed that they were spiritually affected by Covid-19 lockdown. Covid-19 had a range of effects on respondents' spirituality, including restricted access to church, fear of getting infected, and feelings of vulnerability and strength. Respondent 1 said that *“during the time of covid 19 most churches were forced to close, leaving us with nowhere to go and practice our cultural beliefs”*. Respondent 2 provided that *“we were no longer allowed to go every Sunday to praise God as I am a Christian, this also gave me stress because I believe that at Church is a place of relaxation. However, 1 participant out of 15 said Covid-19 did not affect them spiritually”*.

13.3% of participants out of 15 confirmed that they were personally affected by the Covid-19 lockdown. Covid-19 caused 6 respondents to feel isolated, depressed, scared, drained, and without the ability to meet friends and family, as well as to engage with other students face-to-face and attend traditional events. Additionally, respondent 3 confirmed that *“I lost some of my loved ones”*. Respondent 4 commented that *“I had lack of money, exposure to depression because now we are left alone as I have no parents or guardians”*. Furthermore, all participants mentioned the disruptions to their health and daily routines due to lack of movement.

20% of participants out of 15 expressed that they were socially affected by Covid-19 pandemic. Covid-19 had a negative effect on 6 respondents socially, causing isolation and a lack of connection with family and friends, as well as not being able to attend social gatherings or make new friends, impacting overall mental health. Respondent 5 declared that *“we were always indoors, nowhere to go and I couldn't even visit my family members during the Covid-19 days because those were like days of death to me”*. Moreover, respondent 6 mentioned that *“the lockdown restricted me from socializing as group meetings were not allowed so staying at home was depressing”*.

In the figure 49 above, there is no participant who indicated that they were financially affected by Covid-19 but only during focus group interviews. 15 of them highlighted that Covid-19 had widespread financial impact, ranging, from loss of jobs and income, to difficulty accessing funds, to overspending due to reduced activity, to closure of businesses.

(f) Positive impact of Covid-19 on participant’s studies

In figure 48, it is represented that 13.3% of participants mentioned that they were positively impacted by Covid-19 lockdown. 2 participants out of 15 mentioned that Covid-19 positively impacted studies by providing greater access to educational resources, increasing familiarity with technology, and promoting independent learning. Respondent 1 concluded that “it enabled students to gain knowledge on topics they did not understand, master online writing, and develop an appreciation for blended learning”.

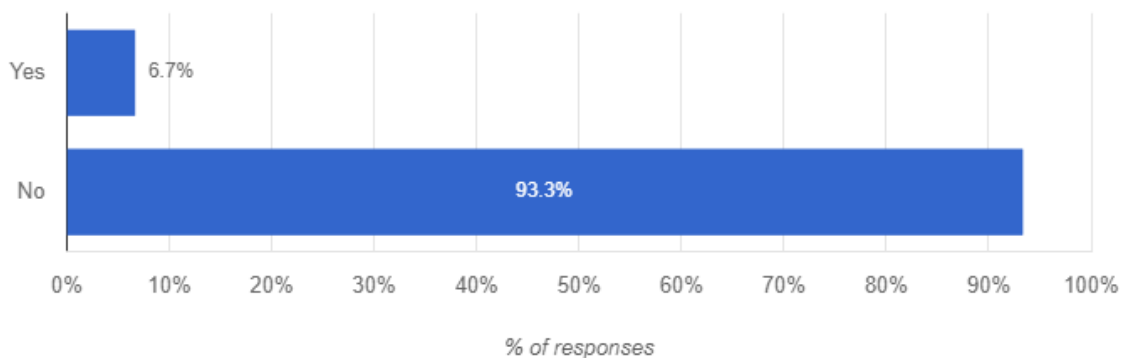


Figure 50: Representation performance of participants with regard to passing or failing BIKS modules due to Covid-19 lockdown

In the figure 50 above, 6.7% of participants out 15 mentioned that they failed modules as they were affected by the Covid-19 lockdown. Hence, 93.3% confirmed that they did not fail modules resulting from the impact of Covid-19. In the figure 51 below, 26.7% participants out of 15 shows that they failed modules due to a lack of knowledge in using online platforms for online learning while none of them confirmed failure of modules due to lack of study materials.

6.7% of participants out of 15 mentioned that they failed modules due to not understanding the module content. 40% of participants indicated that the reasons provided by the researcher as options did not apply to them while 20% of participants out of 15 stated that all of the below

mentioned reasons apply to them as they contributed to failure of modules. 6.7% of participants confirmed that mentioned that there were other factors that contributed to failure of modules.

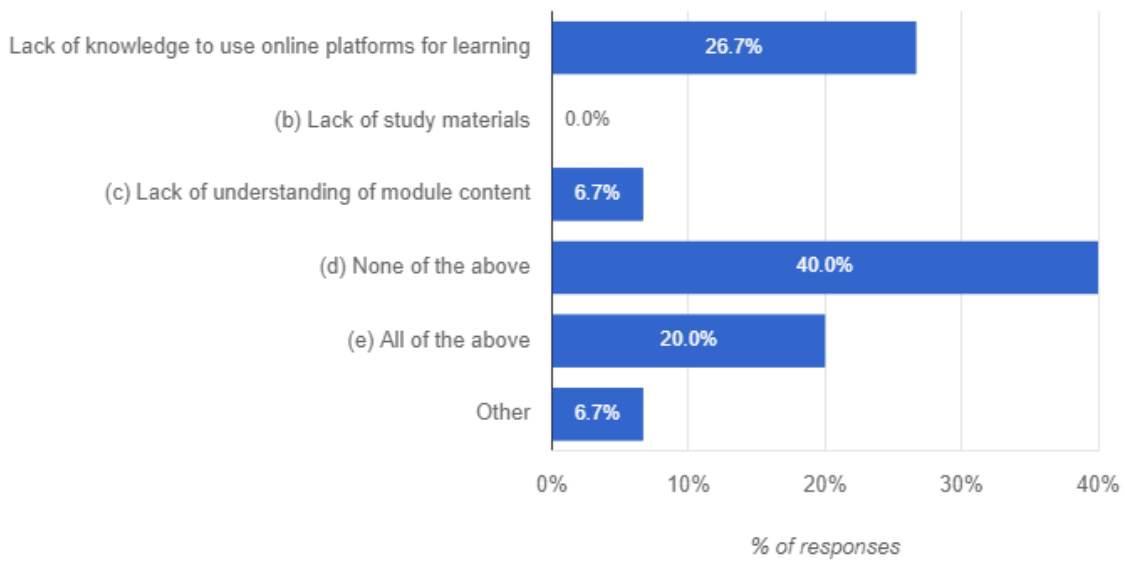


Figure 51: representation of contributions resulting failure of modules

In figure 52 below, 28.6% of participants out of 15 indicated that they failed modules less than 5 per academic year counting from first to the end of second semester while on the other hand there is no single participants who demonstrated that they failed all modules or modules over 5. 71.4% confirmed by choosing other as 1 of the 15 participants said “*I am still a first year*”. Therefore, 9 of participants mentioned that they failed none of the modules.

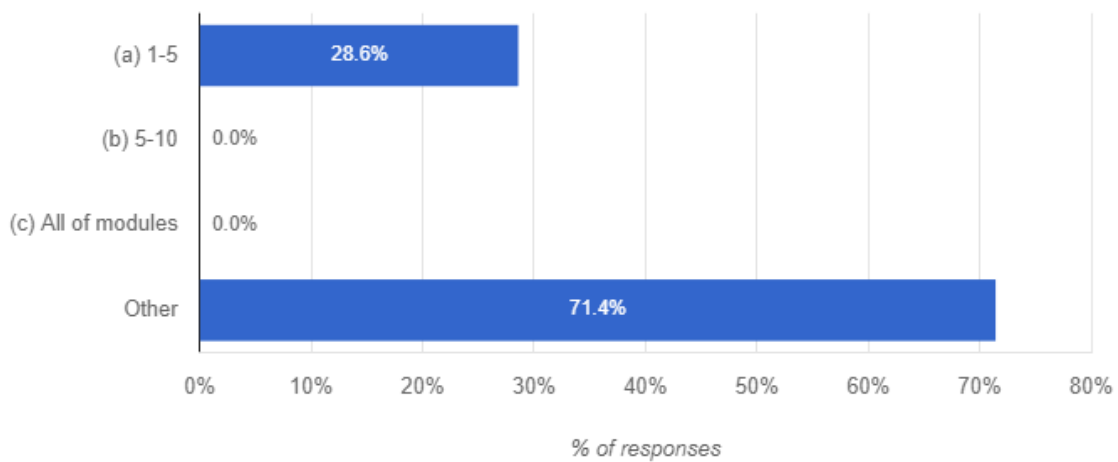


Figure 52: Representation of the number of modules failed by participants

(g) Challenges faced by participants with the use of ICT for online learning

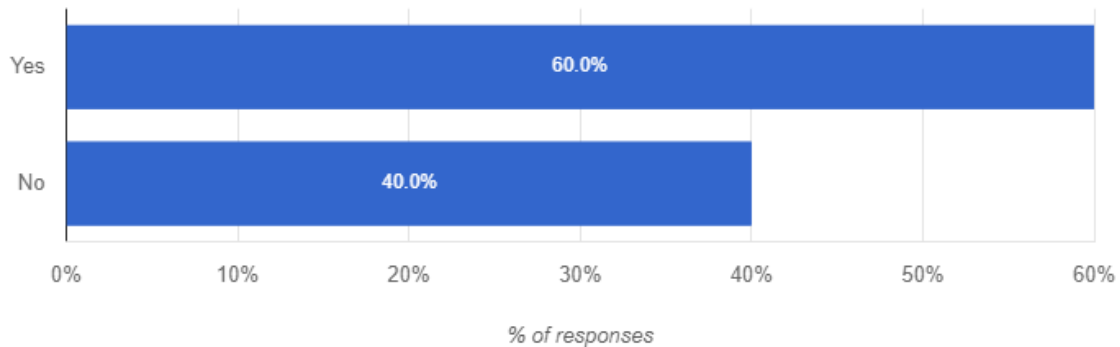


Figure 53: Representation of whether participants had challenges or not with using ICT for online pedagogy

On the representation above, it is shown that 60% out of 15 participants have been challenged by the use of ICT for online learning while on the other hand, 40% of participants indicated that they had no challenges. Respondent 1 said that “*data affordability, internet access, poor network connectivity due to geographical location and new platforms as were difficult to use*”. Respondent 2 commented that “*access to devices such as laptops were a problem*”.

Respondent 3 provided that “*it was difficult to access information related to course content*”. All participants were concerned about poor network connectivity even though they had the devices for online learning. Respondent 4 mentioned that “*online learning was not easy because I am coming from high school and I knew nothing about zoom meeting and how the platform works*”. Respondent 5 concluded that they managed to learn how applications used for online learning work.

In the figure 54 below, 60% of participants confirmed that they had only smart phones for online learning while none had laptops and internet connectivity only. 13.3% of participants mentioned that they had smartphones and laptops only and laptop and internet connectivity only. 8 participants out of 15 indicated that they do not have money to buy devices for online learning or blended learning. Hence, 7 of participants had the devices such as smartphone and laptops. 6.7% of participants said that they had all of the abovementioned for online learning. Respondent 6 stated that they used desktop computers and laptops from their university library.

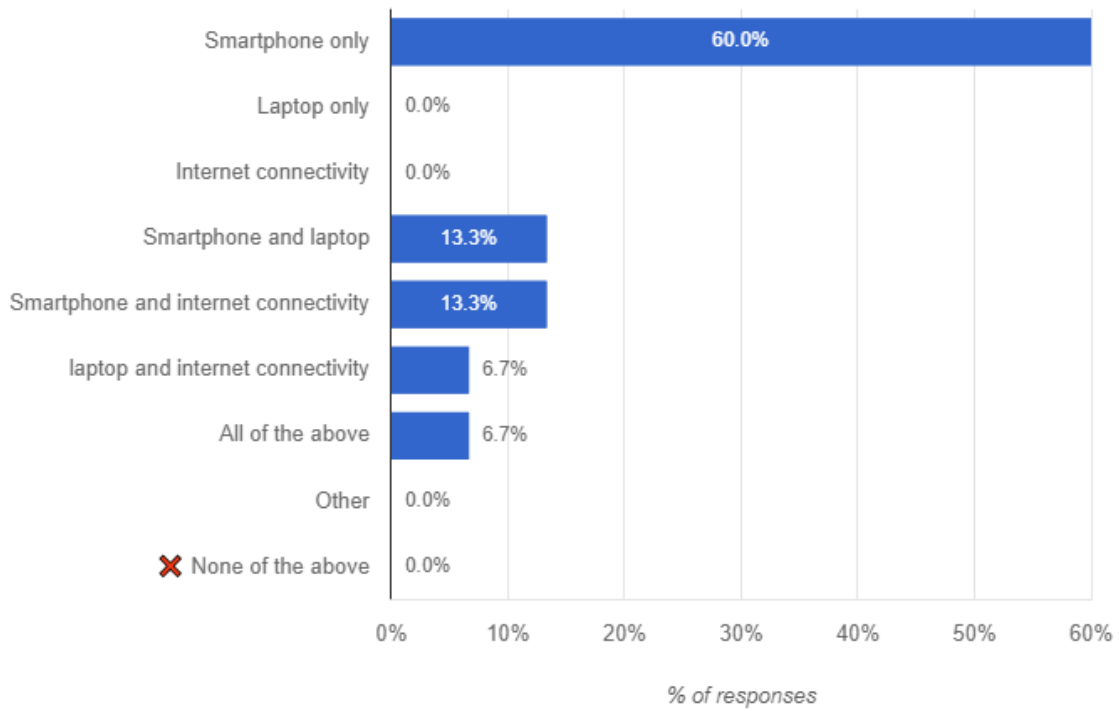


Figure 54: Representation of access to online learning devices and network by participants

(h) Benefits of using ICTs for online learning and blended pedagogy

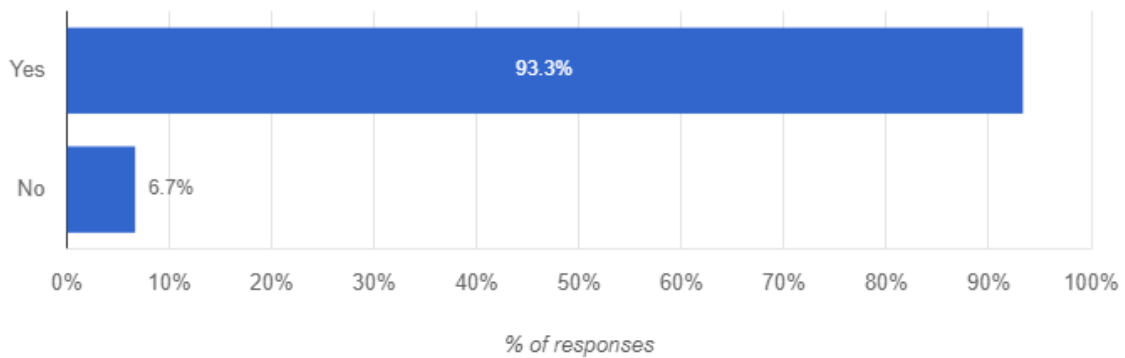


Figure 55: Representation of whether participants benefited or not from using ICTs for online learning

93.3% of participants in the figure 55 above, declared that they benefited from using ICTs for online learning while on the other hand 6.7% noted that they did not benefit at all. 2 Participants

out of 15 shared that they learned how to conduct online video conferencing meetings as they were exposed to using them for online learning. Respondent 1 added that “*I learned to organise meetings online, being able to share documents online and learn independently*”. Respondent 2 mentioned that “*I learned more about technology*”. In Figure 56 below, 26.7% of participants out of 15 demonstrated that they were challenged by online pedagogy more than they benefited from it. 53.3% of them indicated that they benefited from online learning more than they were challenged by it while 20% confirmed that they were new to the pedagogy.

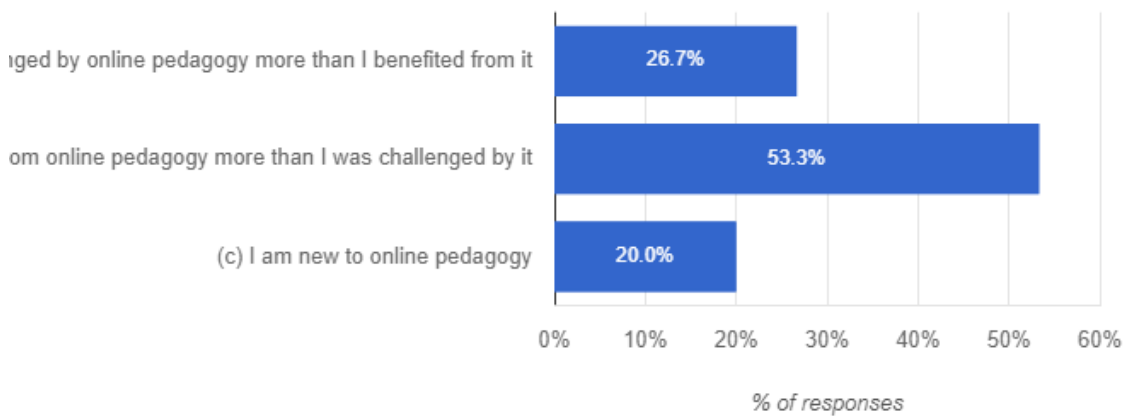


Figure 56: Representation of participant’s perceptions on whether they benefited or challenged by online learning.

3 participants said that time management and improved virtual communication and gathering more information online. 10 Participants confirmed that communication was much easier in an online environment. Respondent 3 mentioned that “*I learned the use of applications like Microsoft teams and Zoom and I ended up registering for online course on digital literacy that equipped me with knowledge on how Microsoft teams and office work*”. 13 participants confirmed that they had enough time to study and attend meetings and for my personal duties because online learning is convenient and time saving. In the figure below, it is represented that all 15 participants confirmed that they are satisfied with online learning.

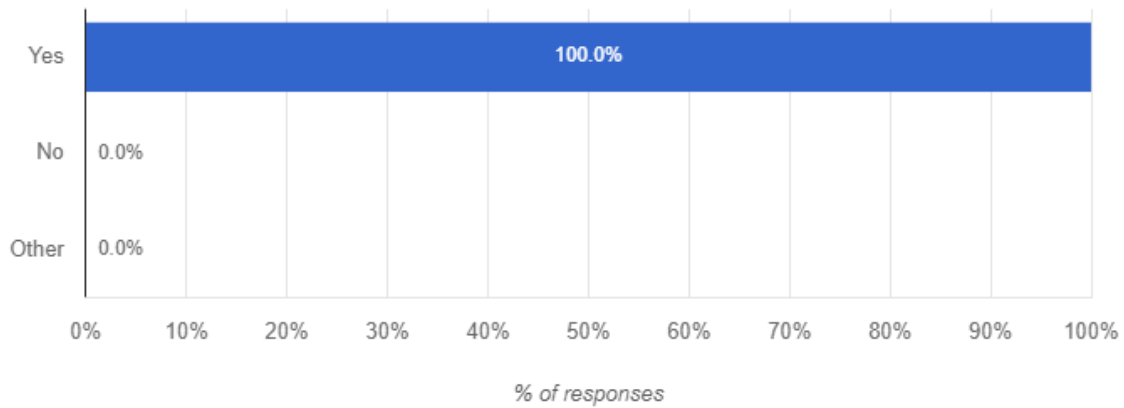


Figure 57: Representation of satisfaction of participants with online learning

40% of participants out of 15 declared that they were extremely satisfied with online learning while 46.7% mention that they were moderately satisfied with this pedagogy. However, 13.3% of participants out of 15 indicated that they there is no extend that can scale their satisfaction with online learning. In the figure 58 below, 86.7% of participants indicated that they would like to try blended pedagogies for teaching and learning Bachelor of Indigenous Knowledge Systems while on the other hand, 13.3% of them do not need blended pedagogies.

Respondent 4 declared that they do not have an idea of challenges that might be brought by blended pedagogies. However, Respondent 5 argued that *“blended pedagogy will be time consuming and more theoretical sided”*. Limited access to technology will bring about unsuccessful implementation of the pedagogy. Respondent 6 commented that *“we will be able to connect with various people both online and face-to-face and tackle academic work together”*. Respondent 7 concluded that there will be no challenges since thing that cannot be done face-to-face will be done online.

In a nutshell, participants benefited from the use of online platforms for learning Bachelor of Indigenous Knowledge Systems by gaining access to more information, becoming more familiar with BIKS, learning new things, interacting with people from other universities, and learning about indigenous culture and language.

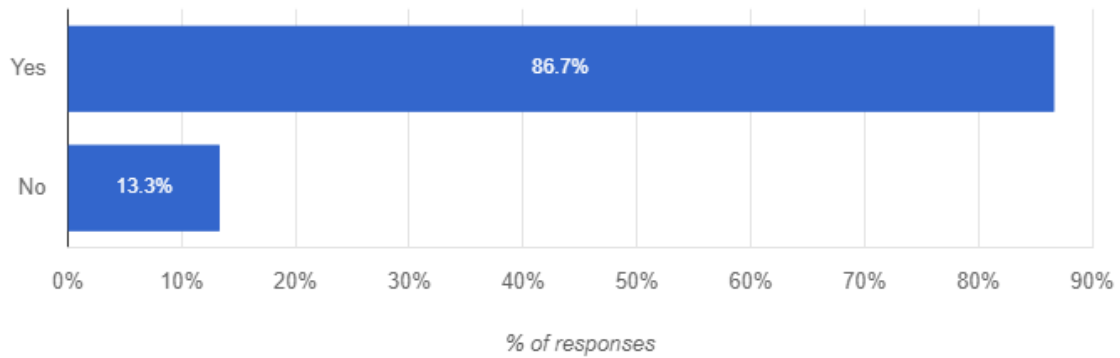


Figure 58: Representation of whether participants would like to try blended (mixed) pedagogies or not for BIKS teaching and learning

In figure 59 below, 60% of participants indicated that they had excellent skills in using the devices for online learning while 20% of participants had both good and fair skills. However, 3 of participants from qualitative data indicated that they struggled with the use of technology including navigating through Microsoft office platforms during online learning.

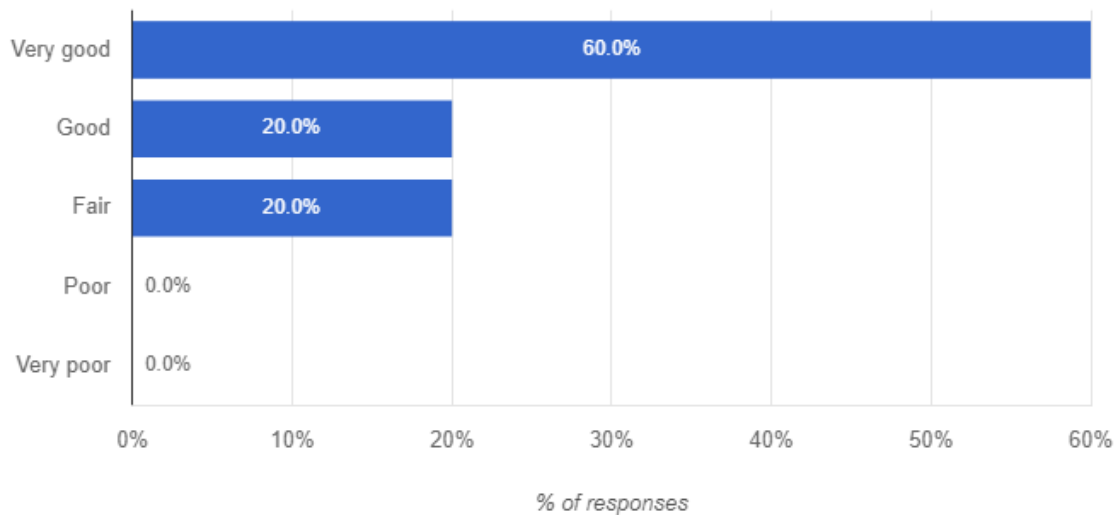


Figure 59: Representation of rating of skills of participants on using ICT and online platforms for online learning.

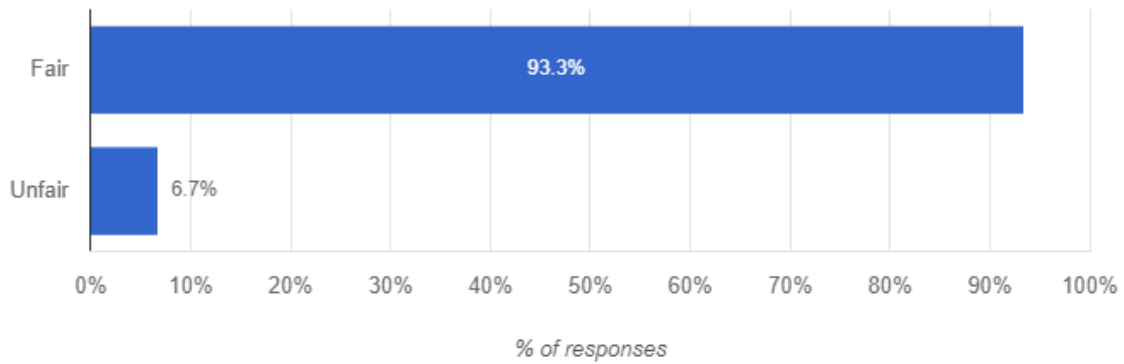


Figure 60: Representation of the kind of support participants received during Covid-19 lockdown while studying.

In figure 60 above, 93.3% of participants alluded that they received fair support during Covid-19 lockdown while studying while 6.7% concluded that they received unfair support. 14 participants indicated that they were supported to overcome their challenges with online pedagogy through friends' meetings, provision of links to Zoom meeting, data access, advice on background cleaning, teaching how to use online platforms, data distribution, preparation of classes for those struggling, and assistance from university ICT staff. Hence, a single participant specified they were not supported in any way.

In figure 61 below, 20% of participants confirmed that they got supported by the university during online learning under Covid-19 lockdown. Consequently, 26.7% indicated that they were supported by lecturers while 6.7% confirmed that tutors supported them. 33.3% of participants mentioned that they received support from friends while 6.7% mentioned that their parents supported them. Participants were supported to overcome their challenges with online pedagogy through friends' meetings, provided links to Zoom, data access, advice on background cleaning, teaching how to use online platforms, data distribution, preparation of classes for those struggling, and assistance from university ICT staff.

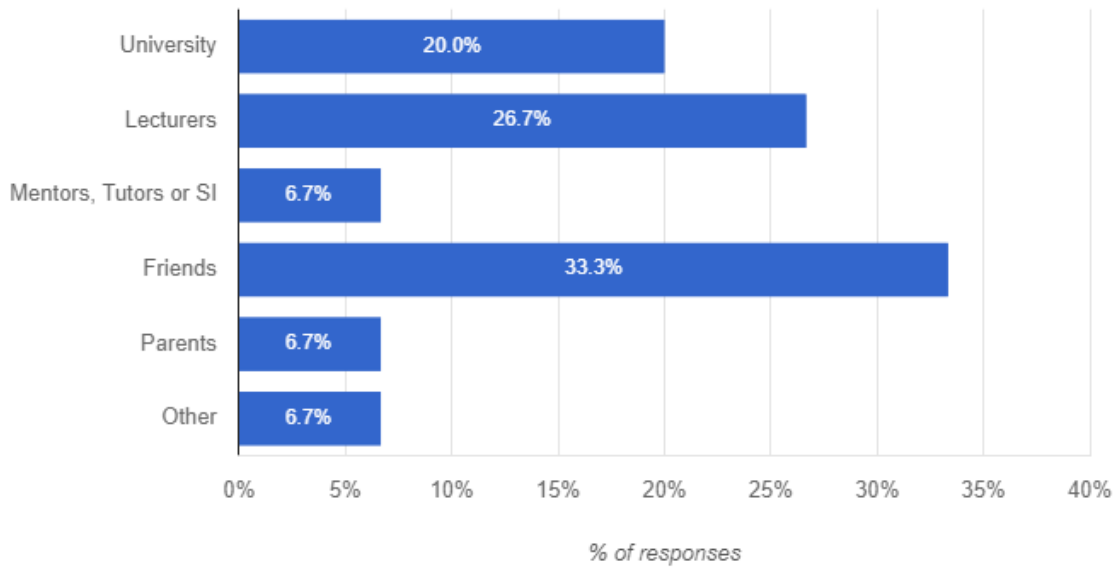


Figure 61: Representation of rating of support participants received during online learning during Covid-19 lockdown.

In figure 62 below, 46.7% alluded that they agree that online pedagogy should be permanently implemented in higher education as part of pedagogy while on the other hand 33.3% do not agree with it. 20% of participants out of 15 are not sure of whether online pedagogy should be permanently applied in the pedagogy or not.

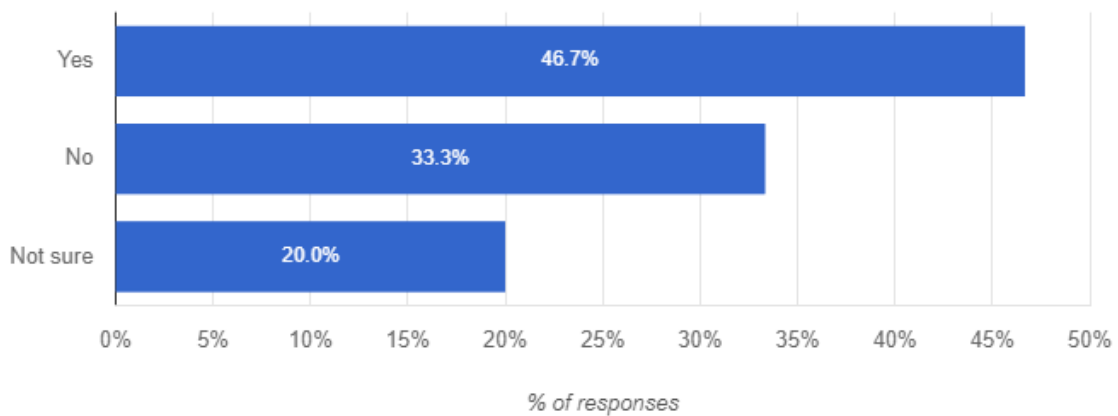


Figure 62: Representation of recommendation of online pedagogy permanent implementation in the pedagogy

In figure below 63, 80% of participants alluded that they were using WhatsApp platform to communicate with lecturers and fellow students during online learning. There is no participant who indicated the use of Facebook and emails for communication during online learning. 6.7% of participants mentioned that they used Zoom meetings while 13.3% confirmed the use of Microsoft Teams for video conferencing sessions. 10 participants mentioned that the online platforms such as Microsoft teams, Zoom meetings, UNIVEN Moodle, email and Google meet were new to them. While 5 of the participants indicated that they were familiar with the online communication platforms used for online learning.

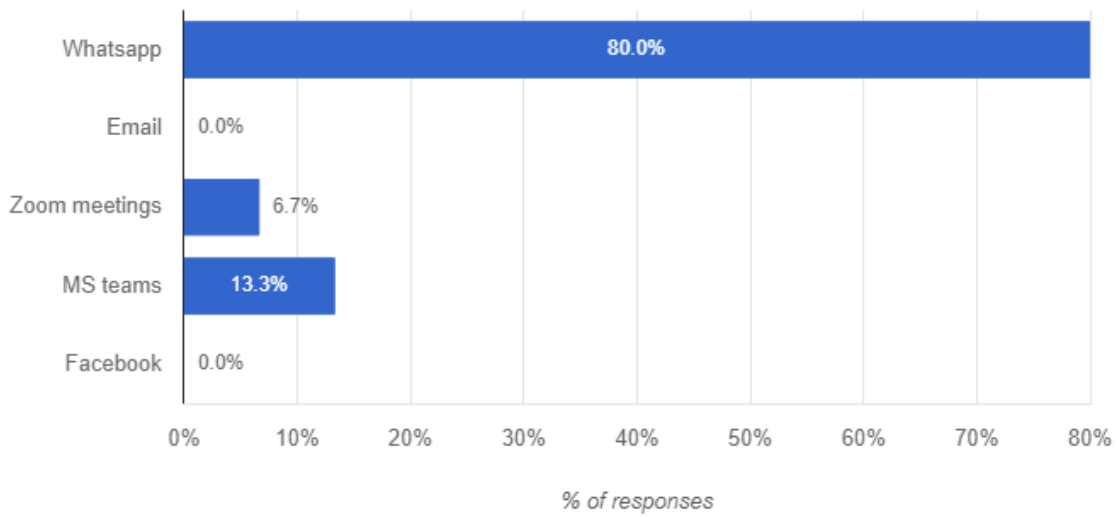


Figure 63: Representation of frequently used online platforms for online learning

(i) Challenges of moving back to face-to-face pedagogy

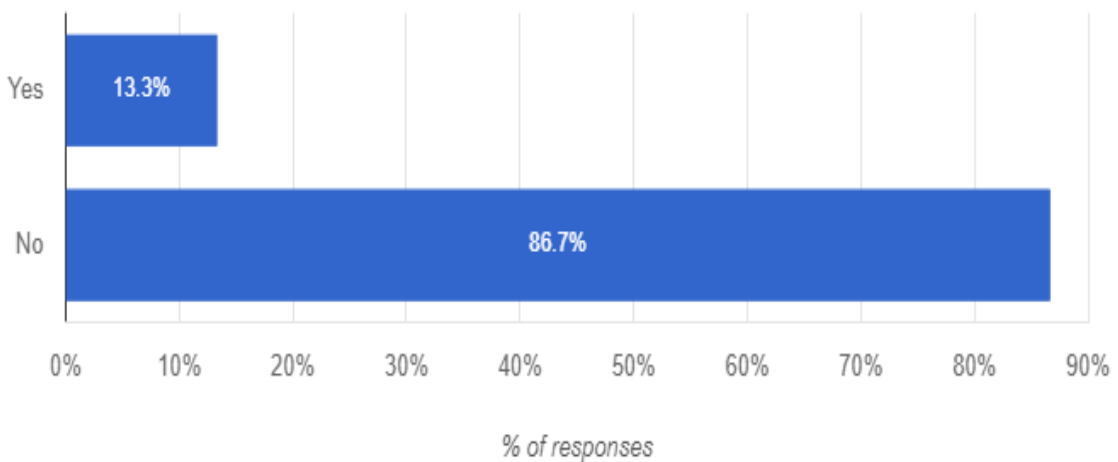


Figure 64: Representation of whether participants were experienced challenges or not with face-to-face pedagogy

In Figure 64 above indicated that 13.3% of participants were challenged during face-to-face pedagogy, 86.7% of them showed that they had no challenges at all. In figure below 65, 86.7% of participants mention that they received support during face-to-face pedagogy while 13.3% demonstrated that they did not get any form of support during the pedagogy.

Respondent 1 mentioned that “*no one supported me on my studies*” while other participants said that *they were supported by their parents by making me free from home chores to attend online sessions, teachers, and lecturers by having extra classes, study materials and word of courage to overcome challenges with face-to-face learning*”. Moreover, all 15 of participants further concluded that challenges with face-to-face pedagogy included being laughed at for wrong answers, difficulty engaging in class, lack of opportunity to use technology, low lecturers’ attendance, and difficulty understanding questions in English.

10 participants stated that challenges include getting study resources on time, engaging with the material and having enough confidence in oneself, scheduling and access to lecture halls, not having time to understand online platforms, and not understanding the material. Furthermore, participants indicated that they dealt with such challenges by seeking assistance, being proactive and positive, engaging in open discussions, and leveraging technology.

Respondent 2 supported that “*social interaction with peers was a challenge because during my first year, I had to learn using Setswana of which I was not familiar with the language since i am originally from Swati tribe*”. Respondent 3 shared “*that presentations in face-to-face learning are a challenge due to having stage fright*”.

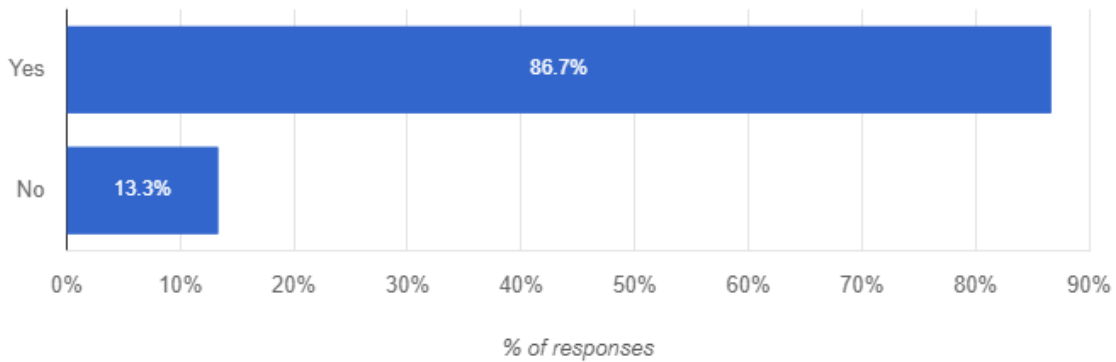


Figure 65: Representation of whether participants received support during face-to-face learning or not

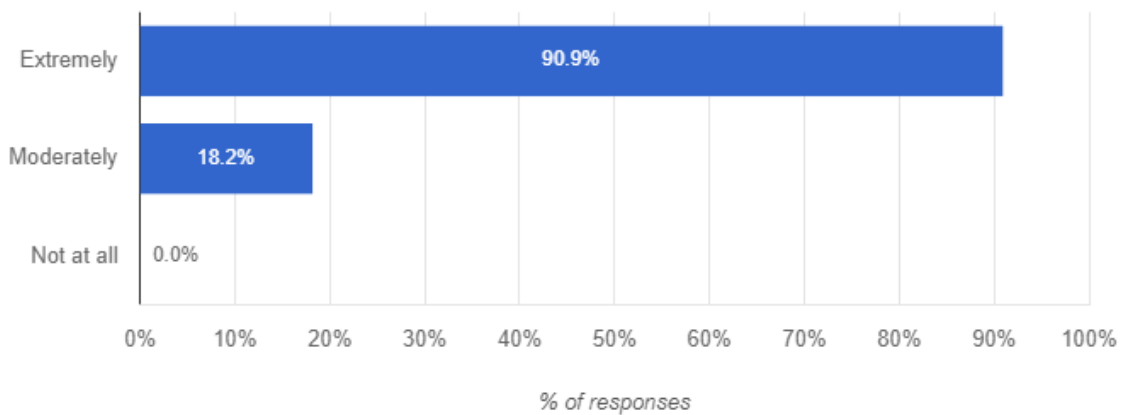


Figure 66: Representation of satisfaction of participants with face-to-face learning

The figure 66 above represents that 90.9% of participants out of 15 declared that they are extremely satisfied with face-to-face pedagogy while 18.2% of them are moderately satisfied with the pedagogy. However, there is no single student who indicated that they were not satisfied with the pedagogy. Participants provided that they were satisfied with face-to-face teaching and learning as they could gain a better understanding of topics, ask questions, engage with lecturers, practice what they had learned, and gain practical knowledge.

(j) Benefits of moving back to face-to-face pedagogy

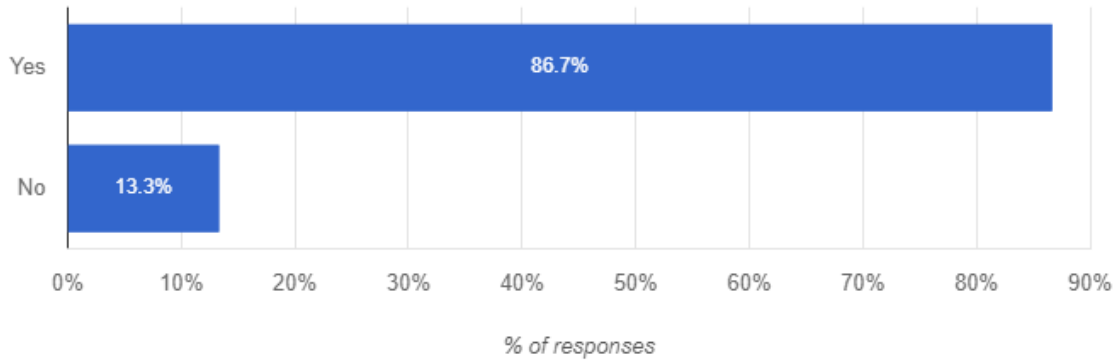


Figure 67: Representation of whether participants benefited from moving back to face-to-face learning or not

In Figure 67 above, it is represented that 86.7% of participants benefited from the transition of pedagogy from online back to face-to-face. This happened when the spread of Covid-19 was contained and controlled. In figure 68 below, it is demonstrated that 66.7% of participants were vaccinated against Covid-19 while 20% of them indicated that they were not vaccinated and 13.3% did not want to disclose their vaccination status. Therefore, 86.7% of these participants indicated that they were not diagnosed with Covid-19 after they tested while 6.7% of them were not sure about their status as they never test.

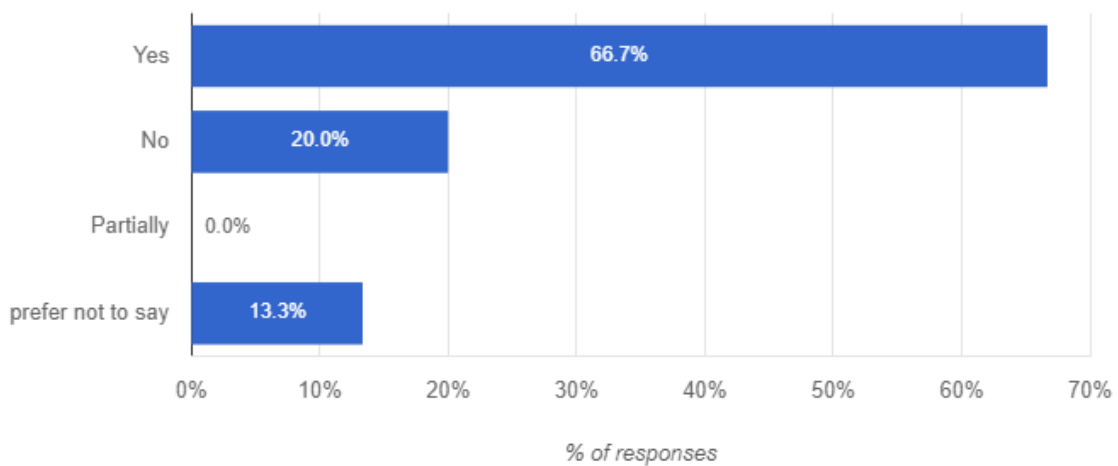


Figure 68: Representation of vaccination status of participants

Participant 1 mentioned that their marks were improved. This was due to more physical interaction with lecturers and peers to gain more insight about the module contents and dealt with misunderstandings without difficulties. In a nutshell, face-to-face pedagogy enabled students to benefit from group works, demonstrations, share more information to gain better understanding through face-to-face presentations as demonstrated by 14 participants. A single participant mentioned that they did not benefit in any way.

Respondent 2 declared that *“in most cases we needed to engage some of the lessons practically with outdoor community engagements than in classes”*. Respondent 3 indicated the love for face-to-face learning. Respondent 4 mentioned that *“topics are understood much better when they are taught live as lecturers would help me understand them better unlike when you attend online sessions with depletion of data”*.

14 participants indicated that they were satisfied with face-to-face teaching and learning as ask questions by engaging with lecturers, practice what they had learned, and gain practical knowledge. Participant 5 stated that I had a chance to consult to lecturers in their offices when I needed clarity on subject information. Therefore, social interaction with peers and lecturers in a physical manner foster understanding of the module as indicated by participants.

(h) Discussion of findings

Students in the University of Venda shared their lived learning experiences on the transition of pedagogies from online to face-to-face vice-versa. These learning experiences were connected to the prospects and challenges they faced while transitioning to the pedagogies. Participants came from different environments as indicated on figure 41. However, figure 36 show the location of participants when they completed the survey of which does not necessarily indicate their primary residence of where they originate from.

As indicated on figure 43, more participants were studying the course full-time while others were studying part-time. Hence, their learning experiences differ according to this method of attendance. There were more final year students who participated in this study than the rest of students who were at the lower academic levels. This contributed to quality data collected from these students who were more experienced than others in this field of study as they also have more knowledge and learning experiences on how the transition of pedagogy due to Covid-19 affected and benefited them on their studies.

80% of participants in this study indicated that they were positively affected by the Covid-19 pandemic on their studies depending on the challenges they faced with ICTs for online learning. Covid-19 negatively impacted students' studies due to the lack of face-to-face engagements; drop in marks; network problems; disruptive online lessons; lack of access to tangible library books; technical challenges with online pedagogy; poor understanding of the topics of module contents; lack of access to technology and data; disruption of education and inability to study at home alone as indicated by participants.

However, Covid-19 impacted positively students on their studies by providing greater access to educational resources through online platforms, increasing familiarity with technology, and promoting independent learning. It enabled students to gain knowledge on topics they misunderstood, mastering writing online and develop an appreciation for blended learning in future academic years. Mukhtar *et al.* (2020) posit that online learning includes accessibility and use of technology to foster learning and flexibility.

In this study students benefited from the use of online platforms for learning Bachelor of Indigenous Knowledge Systems by gaining access to more information, becoming more familiar with BIKS, learning new things such how to use technology for learning and ability to engage with people from other universities in an online mode.

Covid-19 did not only affect students' learning experiences on their academics but also on different aspects of life such as spiritually, financially, personally and socially. Covid-19 affected health care systems, economy and social lives of people (Haleem & Javaid, 2020). In this study, Covid-19 had a range of effects on respondents' spirituality, including restricted access to church, fear of getting infected, and feelings of vulnerability and strength as summarised from findings. It further affected social wellbeing of participants by causing isolation and a lack of connection with family and friends, as well as not being able to attend social gatherings or making new friends and impacting overall mental health by causing anxiety, stress and depression on a personal level.

Although, participants overcame some of online learning challenges through the support from tutors, university, student instructors, friends and family. Students were supported to overcome their challenges with online pedagogy through meeting with friends and mentors to share ideas, provided links to Zoom, data access as parents and university assisted to purchase for students,

teaching how to use online platforms, data distribution, preparation of classes for those struggling, and assistance from university ICT staff as indicated from one of the themes reported.

Consequently, face-to-face pedagogy remain the favoured method of teaching and learning as 14 students out of 15 indicated the benefits of this pedagogy. Face-to-face pedagogy allowed students to benefit from group works, demonstrations during face-to-face sessions, improved marks, access to more information, personal interaction with lecturers, better understanding and presentations. However, students specified the issues of getting study resources on time, engaging with the material and having enough confidence in oneself, scheduling and access to lecture halls, not having time to work independently as spending most of academic time in class.

As blended learning was proposed to be used as part of pedagogical approaches to learning in future, students indicated its limitations and opportunities (Shimkovich *et al.*, 2021). Blended pedagogies for BIKS provides benefits such as learning two essential skills at the same time, integration between technology and face to face learning, collection of more data, enhanced engagement and integrated learning, easy learning, more knowledge, and connecting with people from other universities while limitations were said to be poor attendance, lack of technological knowledge and access, difficulty accessing resources, network problems, and lack of practical work due to online learning.

Muniandy and Abdullah (2023: 07) cited that “Pedagogy in recent education could be either student centred or teacher centred with high-tech or low-tech strategy”. Therefore, the findings show that ICTs are relevant to education only when students and lecturers have relevant technology for online learning. For example, students from both North-West University and University of Venda had similar challenges of network connectivity, lack of devices, low attendance to online classes, lack of social interaction and lack of knowledge to use ICTs.

Chapter Six

A Comparative Analysis of Findings

In this chapter, the results will be compared in compliance with the similarities and differences on demographic information, impact of Covid-19 on aspects of lives of students including the negative and positive impact, challenges and benefits faced by students with the use of Information Communication Technologies and challenges and benefits of moving back to face-to-face pedagogy from BIKS students in North-West University and University of Venda.

6.1 Comparison of participants in this study

As stated under the target population section, there were 295 BIKS students in the North-West University (NWU) while there were 274 BIKS students in the University of Venda (UNIVEN). Among NWU students, only 114 participants managed to open the survey but did not complete the survey. Among UNIVEN students, 114 managed to open the link but did not complete the survey questionnaires. On 33 participants from NWU completed the survey questionnaires while 15 participants from UNIVEN completed the survey questionnaires. The researcher conducted a focus group interviews with 20 BIKS students from UNIVEN and 20 BIKS students from NWU.

6.2 Demographic information of UNIVEN and NWU participants

As represented on figure 10, 5 participants out of 33 are from Bapedi tribe while 1 out of 33 is from Basotho tribe. Consequently, in figure 38, it is shown that 4 participants are from Bapedi. Among NWU students, there were more Batswana than students found in UNIVEN. It is further indicated that there were more students who are from the Zulu tribe than any other South African tribe. For instance, 30.3% of participants are Zulu while 3% are Venda ethnic students.

11 participants from both each of universities are between the ages of 23-27 while those who are between the ages of 18-22 are enrolled more in University of Venda than in North-West University. It is represented in figure 40 that more males participated under UNIVEN than NWU. Hence, more females from NWU participated than in UNIVEN on figure 12.

It is demonstrated on figure 13 and 43 that more students in UNIVEN confirmed that they are studying BIKS in a part-time mode of attendance more than NWU students. Among 33

participants from NWU only 18.2% were first year while at UNIVEN, 26.7% were first year students. There are more second year students from NWU than in UNIVEN who participated in this study just as there are more final year students in UNIVEN than in NWU.

6.2 Comparison of positive and negative impact of Covid-19 on NWU vs UNIVEN students

In both data sets as shown on figure 18 and 45, it is represented that students from both institutions of higher learning have been negatively affected by Covid-19 lockdown. Hence, 24.2% of participants have been positively impacted by Covid-19 lockdown while 13.3% of them at UNIVEN were positively impacted by the pandemic.

All students at the University of Venda and North-West University emphasized the bad experiences with poor network connectivity, scarcity of devices such as laptops, inability to use devices for online learning, lack of interaction with lecturers and peers, Lack of time for studying, difficulty to understand module content in an online learning environment and failure of modules. However, since the change of pedagogy from face-to-face brought some benefits to students.

Participant from NWU indicated that poor network connectivity was caused by loadshedding of electricity while on the other hand UNIVEN participant mentioned that it was caused by living in rural areas where network is adversely poor. Poor network connectivity costed students at NWU to miss assignment submissions and attendance of classes while on the other hand UNIVEN participant concluded that data was a problem in accessing online classes.

North-West University students alluded that lack of knowledge and skills to use Information Communication Technology was a challenge and they had to be independent while on the other hand, UNIVEN students specified that studying at home was an issue as they were more familiar with study groups. However, all students from both institutions highlighted cancellations of examinations which benefited them by getting distinctions in their modules.

It was said by NWU participants that online learning was flexible as it taught them to be more responsible in terms of time management for studying and meeting deadlines while on the other hand, as represented on figure 47, 93.3% out of 15 participants from UNIVEN illustrated that they did not fail modules in high volume due to online learning experiences.

Students from NWU and UNIVEN indicated that they benefited from online learning by being equipped with knowledge and skills on how to use devices and applications for online pedagogy. Students illustrated the flexibility of online learning as they work independently on studying and having access to devices. Students in the UNIVEN and NWU mentioned that online learning brought them access to course information when they could not attend face-to-face classes due to Covid-19 lockdown regulations.

6.3 Comparison of the impact of Covid-19 on aspects of lives of students

11 participants from North-West University (NWU) out of 33 confirmed that they were academically affected by Covid-19 lockdown on your studies whereas 9 participants out of 15 University of Venda (UNIVEN) participants indicated the same. UNIVEN participants mentioned that lack a conducive study environment affected their mental health as they were stressed and anxious caused by fear to fail modules. These academic challenges are far beyond the issues of lack of devices and data, access to study materials and network connectivity as mentioned on the negative impact of Covid-19 section.

4 participants from NWU out of 33 demonstrated on figure 22a that they were spiritually affected by Covid-19 lockdown as soon as Lockdown regulations were implemented. 1 out of 15 UNIVEN participants mentioned that, they were spiritually affected by Covid-19 lockdown. This was due to not being able to travel and attend to churches. One of the UNIVEN participants indicated the feeling of peace and relaxation when they attended church services were missing.

2 participants from the North-West University and a single participant from University of Venda stated that they were personally affected by Covid-19 lockdown. Hence, NWU participants indicated fear of death as people were dying due to Covid-19 infections while on the other hand UNIVEN participants commented with the moods of depression and isolation. NWU and UNIVEN participants indicated the financial impact they experienced due to Covid-19 lockdown as they mentioned loss of employment and fluctuation of prices on goods and services.

3 participants from UNIVEN and 4 participants out of 33 NWU participants demonstrated that they were socially affected by Covid-19 lockdown. They further indicated the ongoing behaviour of staying indoor and not being able to interact face-to-face with other people such as family members, lecturers and peers as they were abiding to the Covid-19 lockdown regulations. NWU

student concluded that the relationship between friends and family was broken due to lack of communication while UNIVEN student commented that group meetings were restricted.

6.4 Comparison of challenges and benefits of using ICT for online pedagogy

9 participants out of 15 from UNIVEN and 19 participants out 33 from NWU confirmed that they were challenged when they were using Information Communication Technologies for online learning. NWU students specified the issues of lack of devices as one of the students said that she had to borrow a device to have access to online learning while on the other hand students at UNIVEN mentioned that they had only a smartphones and laptops with no access to internet. It is evident that students had other devices with no other access to necessary requirements to successfully adapt to online learning.

NWU students concluded that they faced issues with online video conferencing meetings in which the challenges included poor network connectivity that isolated them from accessing the online classes via Microsoft teams and other online platforms. Furthermore, one of the participants mentioned that he had a difficulty in prioritizing between personal and academic times as he spent more time on social media than studying or writing assignments. However, time management skills are required for online learning hence it is a personal choice to decide on whether you prioritize or not. The list of challenges is endless as some of the challenges repeated themselves on the qualitative and quantitative data collected.

10 participants out of 33 from NWU and 14 participants out of 15 from UNIVEN confirmed that they benefited from using online learning platforms and Information Communication Technologies for online pedagogy. Participants from UNIVEN mentioned that they learned how to use online platforms to excavate information and share it with other peers while on the other hand, NWU participants alluded that recorded meetings were able to be reviewed later after sessions for revision. Therefore, online learning was flexible and time saving. Some of the benefits and challenges are discussed on the above information.

6.5 Comparison of challenges and benefits when transitioned from online back to face-to-face pedagogy

7 participants out of 33 from NWU and 2 participants out of 15 from UNIVEN specified that they had challenges with transitioning from online back to face-to-face pedagogy due to the benefits of online pedagogy. However, 13 participants from UNIVEN and 22 participants from NWU confirmed that they had no challenges with the transition.

Challenges that NWU students experienced included lectures being cancelled without announcement, walking distance to campus, impatience of lecturers towards students and wearing masks during classes which made it difficult to communicate effectively whereas UNIVEN students mentioned that they had low self-esteem during face-to-face classes due to being laughed at when sharing their thoughts, lack of opportunities to use technology, and receiving study materials late. However, some of the participants shown that they benefited from the transition.

27 participants from NWU and 13 participants from UNIVEN alluded that they benefited from the transition while 6 participants from NWU and 2 participants from UNIVEN indicated that they did not benefit at all. UNIVEN students demonstrated that the benefits comprised of ability to travel and learn from outdoor activities, better understanding of lecturers due to live demonstrations while NWU students declared that face-to-face communication with lecturers and students assisted them to better understand topic of modules.

Chapter Seven

Limitations, Conclusion and Recommendations

6.1 Limitations

The recruitment of participants from University of Venda was difficult due to the location that required travelling to the institution because the researcher used online platform such as WhatsApp and Google mail to share research information in the form of video and documents to recruit participants. This led to a low participation in the survey and focus group interviews. Since, the student study at North-West University, it became easier to recruit students from the institution. This is why participation of North-West University students is higher than students from University of Venda.

Students who enrolled during Covid-19 lockdown had more experiences to share in this study than those who started their enrolment towards the contained era of Covid-19 pandemic. Hence, the researcher piloted the questionnaires of the research to triangulate and amend the questionnaires to accommodate students who enrolled after Covid-19 was contained during lockdown regulation level 1 from 2022 up to this date. Some of students who enrolled during Covid-19 lockdown graduated while others are currently postgraduate students.

6.2 Conclusion

Findings proved that there are differences and similarities in terms of how Covid-19 had an impact on BIKS students in connection to their learning experiences. In terms of the negative impact of Covid-19 on students, challenges faced by students with the use of ICTs and transition from online to face-to-face pedagogy, it is ideal that universities become aware of these experiences for future plans in the pedagogical development of the curriculum.

The results of this study have shown that students have benefited from the transition of pedagogy in a way that differs in connection to the learning experiences of students in varying institutions of higher learning. Therefore, the contribution of this study reinforces the consideration in the implementation of a combination of instruction methods for the continuing benefit of students and access to success. This will enhance the performance of students and allow them to have a choice on how they want to learn which puts them in control of their own success. Preferences of students on pedagogical approaches to learning is significant.

Implementation of hybrid learning must take place because findings indicated that students benefited from online learning more than they were challenged by the transition. However, hybrid learning comes with its own challenges and benefits. Hence, it is important that online learning experiences become lessons to refer to when the implementation of hybrid learning occurs. For example, access to network connectivity and devices must be the first thing to avail to students before preparing the venue tools for hybrid learning.

This is mainly because the universities implemented online learning as an emergency pedagogy due to Covid-19 pandemic. Therefore, since higher institutions of teaching and learning are no longer under pressure due to a pandemic. It is key to thoroughly prepare for hybrid learning. Investment of time piloting the pedagogy will enable universities to establish errors early before formalizing the pedagogy and gain access to provide solutions either than rushing for implementation with no enough knowledge and relevant equipment for both students and staff.

6.3 Recommendations

- A need to incorporate hybrid learning in the education system for better and productive learning experiences to accommodate pedagogy preferences of students.
- More innovations to be made on technological devices for better network connectivity and access to a better hybrid learning experience.
- A need for university collaboration with technology innovators for greater student learning support and maintenance to the use of devices and applications on education.
- More studies must be done with a focus on the hybrid learning experiences of students to capture their voices for a better decision-making process by the university when implementing the pedagogy in the curriculum.
- It is important that higher institutions management to conscientize themselves about the use of technological applications such as ChatGPT to regulate and promote the ethical use in education and enhance learning access and success.

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6. LIST OF APPENDICES

6.1 Data collection tools

(a) North-West University student' demographic information form

NWU DEMOGRAPHIC INFORMATION OF PARTICIPANT

Names and Surname	
Level of study e.g 1 st year	
Gender	
Age of participant	
Contact no and Email address	
Residence occupation e.g on-campus or off-campus	
Ethnicity e.g Tswana, Venda, Pedi, Zulu etc.	
Language preferred for communication E.g English, Tswa etc	
Mode of interviews (online or face-to-face)	
Network service (Vodacom,MTN, Telkom..etc)	

(b) University of Venda students' demographic information form

UNIVEN DEMOGRAPHIC INFORMATION OF PARTICIPANT

Names and Surname	
Level of study e.g 1 st year	
Gender	
Age of participant	
Contact no and Email address	
Residence occupation e.g on-campus or off-campus	
Ethnicity e.g Tswana, Venda, Pedi, Zulu etc.	
Language preferred for communication	
Mode of interviews (online or face-to-face)	
Network service provider e.g MTN, Vodacom etc.	

6.2 Focus group interview questionnaires (NWU & UNIVEN)

Date of interview:

Time:

Participants: Bachelor of Indigenous Knowledge Systems first year students

Mode of communication: online/face-to-face depending on participant's preference

(a) Researcher welcome participants

Greetings, I welcome you all in this focus group interview and I would like to thank you for being part of this study. I believe you know what the study is all about since we had the first meeting, and I explained the study through handing out prior and informed consent and non-disclosure

agreement. Kindly note that this meeting will be recorded for future use such as data analysis and reviews.

(b) Rules of the meeting (Online)

- ✓ Kindly switch on your videos and switch off your microphones since the background noises will not disturb us.
- ✓ All of you will be required to switch on their microphones only when you are given a chance to speak.
- ✓ All of you will get a chance to speak so let's allow one person to speak at a time.
- ✓ If you want to speak, raise a hand and I will approve your chance after the other speaker has finished.
- ✓ It would be highly appreciated for me when you start by introducing yourselves when given a chance to speak for the first time. For example, your name and level of study.
- ✓ Should you experience technical issues, do not hesitate to text via chats so we can know how everyone is doing.

(b) Rules of the *Lekgotla* (face-to-face)

- Kindly introduce yourself, then proceed with pointing out your perspectives.
- No disturbances when others are answering questions since everyone will get a fair chance to speak
- Kindly raise your hand and the researcher will recognize you for you to showcase your views.
- No movements shall be allowed during interviews, unless urgent

(c) Objectives of the *Lekgotla*

- (i) Understanding the attitudes and worldviews of participants on Covid-19
- (ii) Gathering various perspectives on the impact of Covid-19 on first year students
- (iii) Finding out on the challenges and prospects of face-to-face pedagogy
- (iv) Exploring the preferences and recommendations on online pedagogy and face-to-face pedagogies.

(d) Questionnaires (open ended)

- How do you feel about being a first-year student?

- Is there anyone among you who have the experience of being a first-year student in the university?
- How was the experience compared to the current experiences you are facing regarding being a first year?
- Have you been orientated to the university life and environment during Covid-19 lockdown?
- Have you been orientated to the course as a whole?
- If yes, how did that help you?
- If no, how did that affect you?
- What are the differences and similarities between university life and high school life?
- Do you think high school life prepared you for university life?, support your answer
- Which worldview do you believe in and why?
- What do you understand by Covid-19?
- How did you find out about the existence of Covid-19?
- How did you feel when you found out about it?
- Have you been diagnosed with Covid-19?
- How did that affect you? Physically, mentally, academically, and socially?
- Are you vaccinated? Support your answer.
- Is there anyone close to you who tested positive?
- How did that affect you?
- What are the challenges you faced during Covid-19 lockdown with regard to your 1. academics,2. personal life,3. financial life?
- How did those challenges affect you?
- How did you benefit from the challenges?
- How did you overcome those challenges?
- How Covid-19 lockdown affect your academic, financial, social and personal life?
- How did you overcome each impact?
- What are the challenges you faced with face-to-face teaching and learning?
- How have you benefited from face-to-face teaching and learning?
- Did you use technology to learn under face-to-face teaching and learning?
- Do you have a laptop, device, internet connectivity? Why?
- What online platforms do you use for face-to-face learning?
- Between online and face-to-face learning, which one do you prefer? Support your answer?

- How were you supported by the university, parents during face-to-face learning?
- Do you think Covid-19 is over or not? Support your answer.
- Are you prepared for the change of pedagogy, should the Covid-19 lockdown is implemented?
- How would you feel, should the method of teaching and learning change from face-to-face to online?
- How often do you use technology in face-to-face learning?
- Do you think you are skilled enough to learn online?
- What are the skills you have with the use of technology for learning?
- What were the challenges you faced during face-to-face learning in high school?
- How did you overcome those challenges?
- What are the challenges you are facing in the university?
- How did you overcome those challenges?
- Have you been learning online in high school?
- What type of online platforms have you used for online learning?
- What would you say to future first year students about face-to-face learning?
- What would you say to future first year students about online learning?
- Is there anything you would like to add?

Quick reflexion of questionnaires

- **Which worldview do you believe in?**
- What do you understand by Covid-19?
- How did you feel when you first knew about the first case of Covid-19 in China, Wuhan city?
- How did you feel when you knew about the first case in South Africa?
- How did that affect you?
- Have you been diagnosed with Covid-19?
- How did that affect you physically, mentally, academically and socially?
- Are you vaccinated? Why?
- Is there anyone in your family who tested positive for Covid-19?
- How did that affect you?
- **How did Covid-19 affect your academics?**
- What are the challenges that you faced during online teaching and learning?

- How did you overcome those challenges?
- Do you prefer online or face-to-face teaching and learning?
- What are the benefits of online teaching and learning?
- How did the university support you during Covid-19 lockdown?
- What lockdown level affected your studies most?
- What else affected your studies during Covid-19 lockdown?
- How did the university respond to Covid-19? And how did that affect you?
- **Where did you stay while studying under Covid-19 lockdown?**
- What are the challenges of staying there?
- What are the benefits of staying there?
- How did that affect you?
- Where did you wish to stay while studying?
- What are the benefits of staying there?
- **Does the university provide Wi-Fi for you?**
- How is the connectivity? Poor or good?
- How does that benefit or affect your studies
- Did the method of teaching and learning change from face-to-face to online?
- How did that affect you?
- Did you adapt to such changes?
- How long did you take to adapt and why?
- What were the challenges of that?
- **Did you receive data from university for online teaching and learning?**
- How many megabytes/gigabytes?
- Was the data enough for you to continue online pedagogy?
- How did that affect your studies?
- How many gigabytes did you need for online teaching and learning per month?
- Did online teaching and learning affect your financial life? How?
- What online platforms were you using for online pedagogy?
- Who chose those platforms?
- Were you satisfied with the decision of using those platforms? Why?
- Which platforms were preferable to you?
- Why are they preferable?

- **Did you have devices for online pedagogy?**
- Did you purchase them or were given by the university?
- Were you able to use those devices for online pedagogy?
- How did that affect your studies?
- **Have you failed modules due to change of pedagogy?**
- How many modules did you fail?
- How does that affect your career goals?
- How does that affect your academic sponsors?
- Have you got distinctions due to online pedagogy?
- What are the benefits of face-to-face teaching and learning?
- What are the challenges of face-to-face teaching and learning?
- Are you coping with face-to-face teaching and learning?
- How do you cope?
- What are the study strategies do you use in face-to-face pedagogy?
- How does the university and lecturers support you in a face-to-face teaching and learning?
- **Do you prefer writing exams or doing only assignments and online tests?**
- What are the reasons for your answer?
- Between online and face-to-face pedagogy, what do you prefer?
- Do you think the online pedagogy is effective and why?
- What are the reasons for your preference? Challenges and benefits
- Studying BIKS is challenging during Covid-19, did you have access to adequate and relevant study materials?
- **How did you engage with communities to find answers to questions?**
- How did that affect your academics?
- Are you academically performing during face-to-face pedagogy?
- What else would you like to say about the impact of Covid-19 on your studies?
- **Do you think information in the library is enough for you to complete your tasks?**
- How does that affect your academics?
- Are you able to use online website to access study materials?
- How does the university and lecturers support you to get study materials?
- Are you confident that you will pass your academic year?
- **How did Covid-19 affect your personal life?**

- How does your personal life affect your academics?
- How do you ensure that your personal life does not affect your academics?
- Is it difficult or easy for you to make friends in an online environment?
- How difficult is it?
- Is it difficult or easy for you to make friends in a face-to-face environment?
- What are the benefits of making friends as a BIKS student?
- **Are you satisfied with your financials?**
- Are you a cash paying student or using a bursary?
- Who pays for your fees?
- Are you satisfied with bursary allowances allocated?
- How much did you prefer a month?
- Do you think you have good financial skills? What are they?
- What do you think the university must do during the next pandemic to ensure that your academics are not affected?
- What were your study skills during Covid-19 lockdown?
- Did you have a good environment for online pedagogy?
- What do you think you will need if online pedagogy comes back?
- Are you preparing for any transition of pedagogies?
- Are you preparing for any pandemic?
- Are there anything you would like to add? Any motivation or comments?

Thank you for your participation

6.3 Focus group interview questionnaires (NWU)

Date of interview:

Time:

Participants: 2nd, 3rd and final year BIKS students

Mode of communication: online/face-to-face depending on participant's preference

(a) Researcher welcome participants

Greetings, I welcome you all in this focus group interview and I would like to thank you for being part of this study. I believe you know what the study is all about since we had the first meeting, and I explained the study through handing out prior and informed consent and non-disclosure agreement. Kindly note that this meeting will be recorded for future use such as data analysis and reviews.

(b) (i) Rules of the meeting (Online)

- ✓ Kindly switch on your videos and switch off your microphones since the background noises will not disturb us.
- ✓ All of you will be required to switch on their microphones only when you are given a chance to speak.
- ✓ All of you will get a chance to speak so let us allow one person to speak at a time.
- ✓ If you want to speak, raise a hand and I will approve your chance after the other speaker has finished.
- ✓ It would be highly appreciated for me when you start by introducing yourselves when given a chance to speak for the first time. For example, your name and level of study.
- ✓ Should you experience technical issues, do not hesitate to text via chats so we can know how everyone is doing.

(ii) Rules of the *Lekgotla* (face-to-face)

- Kindly introduce yourself, then proceed with pointing out your perspectives.
- No disturbances when others are answering questions since everyone will get a fair chance to speak
- Kindly raise your hand and the researcher will recognize you for you to showcase your views.
- No movements shall be allowed during interviews, unless urgent

(c) Objectives of the *Lekgotla*

- (i) Understanding the attitudes and worldviews of participants on Covid-19.
- (ii) Exploring the challenges and benefits of online teaching and learning during Covid-19

(iii) Gathering various perspectives on the impact of Covid-19 on first year students.

(iv) Finding out about the challenges and prospects of face-to-face teaching and learning under Covid-19.

(d) Questionnaires (open ended)

- Which worldview do you believe in and why?
- What do you understand by Covid-19?
- Do you think your worldview influenced the way you understand Covid-19?
- How did you find out about the existence of Covid-19?
- How did you feel when you found out about it?
- Have you been diagnosed with Covid-19?
- How did that affect you? Physically, mentally, academically, and socially?
- Are you vaccinated? Support your answer.
- Is there anyone close to you who tested positive?
- How did that affect you?
- What are the challenges of using online platforms for teaching and learning BIKS?
- How did you overcome those challenges?
- What are the types of Information communication technologies (ICTs) do you have?
- What are the challenges you had with ITCs?
- Did you have ITCs before Covi-19 or you got them when you needed them for online pedagogy? Support your answer
- Do you have adequate skills and knowledge to use ICTs and online platforms for online teaching and learning?
- What are the benefits of using online platforms for online teaching and learning?
- Are you prepared for online teaching and learning in future pandemics?
- Would you Advice your university to take BIKS online? Support your answer.
- What challenges would you encounter, should the course be shifted to online permanently?
- What benefits would you experience, should the course be shifted to online permanently?
- How were you supported during online teaching and learning? (Parents, staff, students, university)
- What are the differences between online and face-to-face teaching and learning according to your experiences?

- Do you prefer online or face-to-face pedagogy? Support your answer according to your experiences.
- What are the challenges you are facing with face-to-face pedagogy?
- How do you overcome those challenges?
- What are the benefits of face-to-face pedagogy?
- What type of ICTs are you using in face-to-face pedagogy?
- Do you think ICTs are relevant to face-to-face pedagogy as much as they are to online pedagogy? Support your answer
- How did you benefit from face-to-face pedagogy before Covid-19?
- How do you benefit from face-to-face during Covid-19?
- How are you supporting during face-to-face learning?
- Is there anything you would like to add?

6.4 Focus group interviews questionnaires (UNIVEN)

Date of interview:

Time:

Participants: 2nd, 3rd and final year BIKS students

Mode of communication: online/face-to-face depending on participant's preference

(a) Researcher welcome participants

Greetings, I welcome you all in this focus group interview and I would like to thank you for being part of this study. I believe you know what the study is all about since we had the first meeting, and I explained the study through handing out prior and informed consent and non-disclosure agreement. Kindly note that this meeting will be recorded for future use such as data analysis and reviews.

(b) (i) Rules of the *Lekgotla* (Face-to-face)

- Kindly introduce yourself, then proceed with pointing out your perspectives.
- No disturbances when others are answering questions since everyone will get a fair chance to speak

- Kindly raise your hand and the researcher will recognize you for you to showcase your views.
- No movements shall be allowed during interviews, unless urgent

(ii) Rules of the meeting (Online)

- ✓ Kindly switch on your videos and switch off your microphones since the background noises will not disturb us.
- ✓ All of you will be required to switch on their microphones only when you are given a chance to speak.
- ✓ All of you will get a chance to speak so let's allow one person to speak at a time.
- ✓ If you want to speak, raise a hand and I will approve your chance after the other speaker has finished.
- ✓ It would be highly appreciated for me when you start by introducing yourselves when given a chance to speak for the first time. For example, your name and level of study.
- ✓ Should you experience technical issues, do not hesitate to text via chats so we can know how everyone is doing.

(c) Objectives of the *Lekgotla*

- (i) Understanding the attitudes and worldviews of participants on Covid-19.
- (ii) Exploring the challenges and benefits of online teaching and learning during Covid-19
- (iii) Gathering various perspectives on the impact of Covid-19 on first year students.
- (iv) Finding out about the challenges and prospects of face-to-face teaching and learning under Covid-19.

(d) Questionnaires (open ended)

- What do you understand by Covid-19?
- Which worldview do you believe in and why?
- Do you think your worldview influenced the way you understand Covid-19?

- How did you find out about the existence of Covid-19?
- How did you feel when you found out about it?
- Have you been diagnosed with Covid-19?
- How did that affect you? Physically, mentally, academically, and socially?
- Are you vaccinated? Support your answer.
- Is there anyone close to you who tested positive?
- How did that affect you?
- What are the challenges of using online platforms for teaching and learning BIKS?
- How did you overcome those challenges?
- What are the types of Information communication technologies (ICTs) do you have?
- What are the challenges you had with ITCs?
- Did you have ITCs before Covid-19 or you got them when you needed them for online pedagogy? Support your answer
- Do you have adequate skills and knowledge to use ICTs and online platforms for online teaching and learning?
- What are the benefits of using online platforms for online teaching and learning?
- Are you prepared for online teaching and learning in future pandemics?
- Would you Advice your university to take BIKS online? Support your answer.
- What challenges would you encounter, should the course be shifted to online permanently?
- What benefits would you experience, should the course be shifted to online permanently?
- How were you supported during online teaching and learning? (Parents, staff, students, university)
- What are the differences between online and face-to-face teaching and learning according to your experiences?
- Do you prefer online or face-to-face pedagogy? Support your answer according to your experiences.
- What are the challenges you are facing with face-to-face pedagogy?
- How do you overcome those challenges?
- What are the benefits of face-to-face pedagogy?
- What type of ICTs are you using in face-to-face pedagogy?
- Do you think ICTs are relevant to face-to-face pedagogy as much as they are to online pedagogy? Support your answer
- How did you benefit from face-to-face pedagogy before Covid-19?

- How do you benefit from face-to-face during Covid-19?
- How are you supporting during face-to-face learning?
- Is there anything you would like to add?

Quick reflexion of questionnaires

- Are you happy with the changes of pedagogy from online to face-to-face? Support your answer.
- How does that affect you?
- How does that benefit you?
- What do you do to overcome those challenges?
- Do you think face-to-face pedagogy should be replaced by online pedagogy? Why?
- Where do you stay while studying?
- How does that affect you?
- Where do you prefer to stay?
- What are the benefits of staying there?
- What are the challenges of staying there?
- Did you fail your semester modules ever since face-to-face pedagogy started?
- Do you think you will fail more modules if it continues?
- How many modules did you pass thus far?
- What are the study strategies do you use in face-to-face pedagogy?
- Between these two pedagogies, which one should be a permanently part of curriculum?
- Why do you say so?
- Is it easy or difficult to study BIKS using face-to-face pedagogy?
- Do you attend field trips?
- How does that benefit you?
- What are the challenges of not attending field trips?
- How does the university and lecturers support you in a face-to-face teaching and learning?

Thank you for your participation

6.5 Survey questionnaires for (NWU) & (UNIVEN) participants

Participants: Bachelor of Indigenous Knowledge Systems students

Mode of response: online

Platform: Conjoint.ly (Conjoint analysis)

General questions

1. I understand the purpose of the study

(a) Yes

(b) No

2. I understand my involvement in the study is entirely voluntary

(a) Yes

(b) No

3. I hereby formally

(a) Give consent to participate in this study

(b) Decline to participate in this study

4. What is your home language?

(a) Sepedi

(b) Sesotho

(c) Setswana

(d) IsiZulu

(e) chi-Venda

(f) Swati

(g) IsiNdebele

(h) English

(i) Afrikaans

(j) Chi-Tsonga

(k) Xhosa

(l) Other

5. What are your age?

(a) 18-22 years

(b) 23-27 years

(c) 28-30 years

(d) Over 30 years

6. What is your Gender?

(a) Male

(b) Female

(c) Prefer not to say

(d) Other

7. In which province do you come from?

(a) Limpopo

(b) North West

(c) Mpumalanga

(d) Kwa-Zulu Natal

- (e) Gauteng
- (f) Northern Cape
- (g) Western Cape
- (i) Eastern Cape
- (j) Free State
- (k) Prefer not to say
- (l) Other: specify

8. Are you studying Bachelor of Indigenous Knowledge Systems?

- (a) Yes
- (b) No

9. At which institution are you registered Bachelor of Indigenous Knowledge Systems?

- (a) North-West University
- (b) University of Venda

10. How are you attending Bachelor of Indigenous Knowledge Systems in 2023?

- (a) Full time
- (b) Part time

11. I am a student?

- (a) First year
- (b) Second year
- (c) Third year
- (d) Final year

12. I chose Bachelor of Indigenous Knowledge Systems

- (a) As my first choice to study
- (b) As second choice because other courses were full
- (c) To avoid gap-year
- (d) Other: specify

13. I have love and passion to study Bachelor of Indigenous Knowledge Systems

- (a) Yes
- (b) No

14. Are you vaccinated?

- (a) Yes
- (b) No
- (c) Partially vaccinated
- (d) Prefer not to say

15. Have you been diagnosed with Covid-19?

- (a) Yes
- (b) No
- (c) Not sure
- (d) Prefer not to say

Objective specific questions

16. What pedagogy method did you use for learning Bachelor of Indigenous Knowledge Systems before Covid-19 pandemic?

(a) Face-to-face learning

(b) Online learning

(c) Blended learning

17. Were you prepared for the change of pedagogy from face-to-face to online during Covid-19 lockdown?

(a) Yes

(b) No

(c) Not sure

18. What pedagogy method do you use for learning Bachelor of Indigenous Knowledge Systems in 2023?

(a) Face-to-face learning

(b) Online learning

(c) Blended learning

19. How did Covid-19 impact your studies?

(a) Positively

(b) Negatively

20. In which aspect of your life did Covid-19 affect you most?

(a) Academically

(b) Spiritually

(c) Personally

(d) Socially

(e) Financially

(f) Other: specify

21. Have you failed modules due to Covid-19 lockdown?

(a) Yes

(b) No

22. Choose what contributed to failure of modules?

(a) Lack of knowledge to use online platforms for learning

(b) Lack of study materials

(c) Lack of understanding of module content

(d) None of the above

(e) All of the above

(f) Other: please specify

23. How many modules have you failed up to date?

(a) 1-5

(b) 5-10

(c) All of modules

(d) None

24. Did you have challenges of using Information Communication Technologies for online teaching and learning?

(a) Yes

(b) No

25. Did you benefit from using ICTs for online teaching and learning?

(a) Yes

(b) No

26. Are you satisfied with face-to-face teaching and learning?

(a) Yes

(b) No

27. To what extent are you satisfied with face-to-face pedagogy?

(a) Extremely

(b) Moderately

(c) Not at all

28. Are you satisfied with online pedagogy?

(a) Yes

(b) No

29. To what extent are you satisfied with online pedagogy?

(a) Extremely

(b) Moderately

(c) Not at all

30. Would you like to try blended pedagogies for BIKS teaching and learning?

(a) Yes

(b) No

(c) Not sure

31. Select devices you have access to for online classes?

- (a) Smartphone only
- (b) Laptop only
- (c) Internet connectivity
- (d) Smartphone and laptop
- (e) Smartphone and Internet connectivity
- (f) Laptop and internet connectivity

32. Rate your skills and knowledge of using your devices for online pedagogy?

- (a) Very good
- (b) Good
- (c) Fair
- (d) Poor
- (e) Very poor

33. How was the support you got during Covid-19 lockdown while studying?

- (a) Fair
- (a) Unfair

34. Do you require more support on face-to-face teaching and learning?

- (a) Yes
- (b) Somewhat
- (c) No

35. Which one do you prefer in 2023 academic year?

- (a) Online learning

(b) Face-to-face learning

(c) Blended learning

36. Did you have challenges with face-to-face pedagogy in high school?

(a) Yes

(b) Somewhat

(c) No

37. Are you facing challenges with face-to-face learning in the university?

(a) Yes

(b) Somewhat

(c) No

38. Which online platforms do you use frequently?

(a) WhatsApp

(b) Email

(c) Zoom meetings

(d) Google meet

(e) Facebook

39. Are there online platforms used in online learning that were new to you?

(a) Yes

(b) No

40. Which online platforms you never used before?

(a) WhatsApp

- (b) Email
- (c) Zoom meetings
- (d) Google meets
- (e) Facebook
- (f) All of the above
- (g) None of the above

41. Did you get support you needed to overcome your challenges with face-to-face learning?

- (a) Yes
- (b) No
- (c) Other: specify

42. Which of the following supported you to overcome your challenges with face-to-face learning?

- (a) Learners (peers)
- (b) Lecturers
- (c) Parents

43. Did you get support you needed to overcome your challenges with online pedagogy?

- (a) Yes
- (b) No

44. Which of the following supported you to overcome your challenges with online pedagogy

- (a) University management
- (b) Lecturers/ staff members
- (c) Students/ Peers

(d) Academic peer mentors/ tutors/ student instructors

(e) Other, please specify

46. Did you benefit from the use of online platforms for learning Bachelor of Indigenous Knowledge Systems?

(a) Yes

(b) Somewhat

(c) No

47. Did you benefit from the change of pedagogy from online back to face-to-face?

(a) Yes

(b) Somewhat

(c) No

48. Rate the quality of support you got from the selected answers above?

(a) 0%

(b) 50%

(c) 100%

49. Which one applies to you?

(a) I was challenged by online pedagogy more than I benefited from it

(b) I benefited from online pedagogy more than I was challenged by it

(c) I am new to online pedagogy

50. Were you satisfied with face-to-face teaching and learning in 2022?

(a) Strongly agree

(b) Agree

(c) Disagree

(b) Strongly disagree

(c) Not applicable to me

51. Would you like online pedagogy to be permanently part of the curriculum?

(a) Yes

(b) No

(c) Not sure

6.6 Invitations of recruiting participants from NWU



RESEARCH INFORMATION AND CONSENT FORM

Title of the project: A Comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa

RESEARCHERS

1. **Mr Kapsell Kwena Semanya (Primary researcher)**

Contact: 0711824868, semenyakapsell@gmail.com

2. **Dr Motheo Koitsiwe (Promoter)**

Contact: Motheo.Koitsiwe@nwu.ac.za

3. **Dr Justice Makhanike (Co-promoter)**

Contact: justice.makhanike@univen.ac.za

You are being invited to take part in a **research study** that forms part of a **Master of Indigenous Knowledge Systems** degree. Please take some time to read the information presented here, which will explain the details of this study. Please ask the researcher or person explaining the research to you any questions about any part of this study that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research is about and how you might be involved. Also, your participation is **entirely voluntary**, and you are free to say no to participate. If you say no, your decision will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part now.

This study has been approved by the Faculty of Natural and Agricultural Sciences Ethics Committee (FNAS-REC) with the ethics number **NWU-01242-23-A9**. This implies that the North-West University Senate Committee for Research Ethics (NWU-SCRE) and NWU Data Gatekeeping Committee (NWU-DGC) granted its permission to proceed with this study. Therefore, your participation to this study is guaranteed to be in an ethical manner.

Reasons for invitation: you are an undergraduate BIKS students at North-West University (NWU), you were affected by Covid-19 and holding teaching and learning experiences of the transition of pedagogy (method of teaching and learning)

➤ **Aim of the study:** The aim is to explore and compare the impact of Covid-19 pandemic on students studying Bachelor of Indigenous Knowledge Systems at the North-West University and University of Venda.

➤ **Objectives**

▪ We plan to discover and compare the impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in the North-West University (NWU) and University of Venda (UNIVEN), exploring and comparing the challenges and prospects of using online platforms and Information Communication Technologies (ICTs) for online teaching and learning in both university and to identify, compare the challenges and prospects of moving back from online to face-to-face pedagogy under Covid-19 pandemic in both universities.

▪ This study will be conducted in the North-West University and University of Venda at the venue of your choice and will be done under supervision of experienced researchers as participants will be included in this study. The researcher is experienced as conducted successful research for the completion of honors' degree with students studying Bachelor of Indigenous Knowledge Systems at North-West University, Mafikeng campus as participants.

▪ The research focus is motivated by the fact that the researcher is a Bachelor of Indigenous Knowledge Systems student and probably experiencing similar problems. Therefore, your voices and perspectives will be heard through participation in this study.

You are expected to: participate in focus group interviews to share your learning opinions and experiences on how Covid-19 affected your academics, participate in a survey, and inform the

researcher about your convenience to set up flexible interview schedules including sharing of contact information.

Gains of participation: earning research skills and knowledge through participation in the study, ability to independently do research from earned experiences, easy access to the findings, networking with peers through focus group interviews, sharing of ideas and having your voice heard through publication of your opinions and experiences.

This is a **minimal risk** research as identified by the ethics committee, therefore, there are any physical, psychological, financial, economic, social or any nature of risks that you will experience either than **inconvenience** or **discomfort**. Should there be discomforts experienced by participants during conversations, the researcher will take the measure of stopping the interview and assess the cause and nature of discomfort because the researcher will not ask sensitive questions that may cause discomfort. Participants are free to not answer the questions if they wish to do so.

Confidentiality insurance measures: no personal information of participants will be put into public either through conversations or writing. Privacy of participants is guaranteed and respected. Findings will be reported by supplementing the names of participants with participant 1, 2,3, 4, 5.

Access to findings: the dissertation will be sent to all participants and to North-West University library Boloka repository for publication for open and easy access.

Do not hesitate to contact the primary researcher or promoter or co-promoter to the above contact information should you need anything/ clarity about the study.

Interviews will be held in May-July according to your convenience of which will be discussed further.

Declaration by participant

By _____ signing _____ below, I
..... agree to
take

part in the research study titled: **A Comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa.**

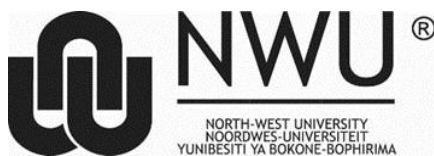
I declare that:

- I have read this information/it was explained to me by a trusted person in a language with which I am fluent and comfortable.
- The research was clearly explained to me.
- I have had a chance to ask questions to both the person getting the consent from me, as well as the researcher and all my questions have been answered.
- I understand that taking part in this study is voluntary and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be handled in a negative way if I do so.
- I may be asked to leave the study before it has finished, if the researcher feels it is in the best interest, or if I do not follow the study plan, as agreed to.

Signature of interviewee..... on (*date*)

**Signature of researcherdate
.....**

6.7. Invitations of recruiting participants from UNIVEN



RESEARCH INFORMATION AND CONSENT FORM

Title of the project: A Comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa

RESEARCHERS

1. **Mr Kapsell Kwena Semenya (Primary researcher)**

Contact: 0711824868, semenyakapsell@gmail.com

2. **Dr Motheo Koitsiwe (Promoter)**

Contact: Motheo.Koitsiwe@nwu.ac.za

3. **Dr Justice Makhanike (Co-promoter)**

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This study has been approved by the Faculty of Natural and Agricultural Sciences Ethics Committee (FNAS-REC) with the ethics number **NWU-01242-23-A9**. This implies that the North-West University Senate Committee for Research Ethics (NWU-SCRE) and NWU Data Gatekeeping Committee (NWU-DGC) granted its permission to proceed with this study.

Therefore, your participation to this study is guaranteed to be in an ethical manner. Permission was also granted from University of Venda ethics committee to proceed this study with you.

Reasons for invitation: you are an undergraduate BIKS students at University of Venda (UNIVEN), you were affected by Covid-19 and holding teaching and learning experiences of the transition of pedagogy (method of teaching and learning)

➤ **Aim of the study:** The aim is to explore and compare the impact of Covid-19 pandemic on students studying Bachelor of Indigenous Knowledge Systems at the North-West University and University of Venda.

➤ **Objectives**

▪ We plan to discover and compare the impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in the North-West University (NWU) and University of Venda (UNIVEN), exploring and comparing the challenges and prospects of using online platforms and Information Communication Technologies (ICTs) for online teaching and learning in both university and to identify, compare the challenges and prospects of moving back from online to face-to-face pedagogy under Covid-19 pandemic in both universities.

▪ This study will be conducted in the North-West University and University of Venda at the venue of your choice and will be done under supervision of experienced researchers as participants will be included in this study. The researcher is experienced as conducted successful research for the completion of Honors' degree with students studying Bachelor of Indigenous Knowledge Systems at North-West University, Mafikeng campus as participants.

▪ The research focus is motivated by the fact that the researcher is a Bachelor of Indigenous Knowledge Systems student and probably experiencing similar problems. Therefore, your voices and perspectives will be heard through participation in this study.

You are expected to: participate in focus group interviews to share your learning opinions and experiences on how Covid-19 affected your academics, participate in a survey, inform the researcher about your convenience to set up flexible interview schedules including sharing of contact information.

Gains of participation: earning research skills and knowledge through participation in the study, ability to independently do research from earned experiences, easy access to the findings, networking with peers through focus group interviews, sharing of ideas and having your voice heard through publication of your opinions and experiences.

This is a **minimal risk** research as identified by the ethics committee, therefore, there are any physical, psychological, financial, economic, social or any nature of risks that you will experience either than **inconvenience** or **discomfort**. Should there be discomforts experienced by participants during conversations, the researcher will take the measure of stopping the interview and assess the cause and nature of discomfort because the researcher will not ask sensitive questions that may cause discomfort. Participants are free to not answer the questions if they wish to do so.

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Interviews will be held in May-June according to your convenience of which will be discussed further.

Declaration by participant

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part in the research study titled: **A Comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa.**

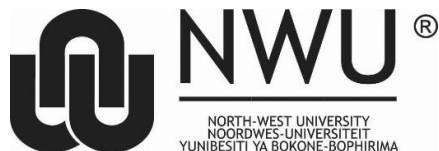
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- I understand that taking part in this study is voluntary and I have not been pressurised to take part.
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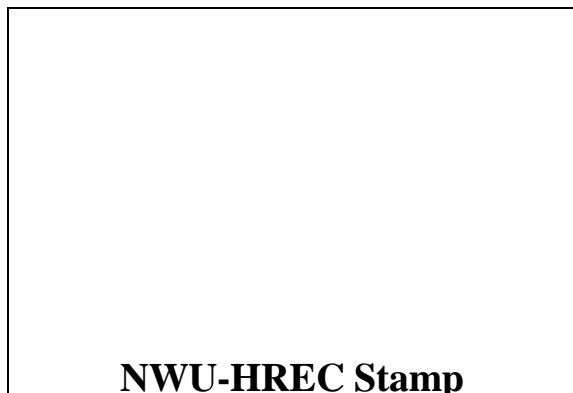
Signature of interviewee..... on (*date*)

Signature of researcherdate
.....

6.8 Prior and informed consent



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Tel: +2718 299-1111/2222
Fax: +2718 299-4910
Web: <http://www.nwu.ac.za>



INFORMED CONSENT DOCUMENTATION FOR BACHELOR OF INDIGENOUS KNOWLEDGE SYSTEMS UNDERGRADUATE STUDENTS AT UNIVERSITY OF VENDA AND NORTH-WEST UNIVERSITY, MAFIKENG CAMPUS

TITLE OF THE RESEARCH STUDY: A Comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa

ETHICS REFERENCE NUMBERS:

PRINCIPAL INVESTIGATOR: Dr M. Koitsiwe, Mr M. Diratsagae & Dr J. Makhanike

POST GRADUATE STUDENT: Mr K.K Semanya

ADDRESS: House 422, Ramongwana no 1, Polokwane, 0700

CONTACT NUMBER: 0711824868

You are being invited to take part in a **research study** that forms part of a **Master of Indigenous Knowledge Systems** degree. Please take some time to read the information presented here, which

will explain the details of this study. Please ask the researcher or person explaining the research to you any questions about any part of this study that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research is about and how you might be involved. Also, your participation is **entirely voluntary**, and you are free to say no to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part now.

This study has been approved by the Faculty of Natural and Agricultural Sciences Ethics Committee (FNAS-REC) with the ethics number **NWU-01242-23-A9**. This implies that the North-West University Senate Committee for Research Ethics (NWU-SCRE) and NWU Data Gatekeeping Committee (NWU-DGC) granted its permission to proceed with this study. Therefore, your participation to this study is guaranteed to be in an ethical manner.

What is this research study all about?

- *The aim is to explore and compare the impact of Covid-19 pandemic on students studying Bachelor of Indigenous Knowledge Systems at the North-West University and University of Venda.*
- *We plan to discover and compare the impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in the North-West University (NWU) and University of Venda (UNIVEN), exploring and comparing the challenges and prospects of using online platforms and Information Communication Technologies (ICTs) for online teaching and learning in both university and to identify, compare the challenges and prospects of moving back from online to face-to-face pedagogy under Covid-19 pandemic in both universities.*
- *This study will be conducted in the North-West University and University of Venda at the venue of your choice and will be done under supervision of experienced researchers as participants will be included in this study. The researcher is experienced as conducted successful research for the completion of Honour's degree with students studying Bachelor of Indigenous Knowledge Systems at North-West University, Mafikeng campus as participants.*
- *The research focus is motivated by the fact that the researcher is a Bachelor of Indigenous Knowledge Systems student and probably experiencing similar problems. Therefore, your voices and perspectives will be heard through participation in this study.*

Why have you been invited to participate?

- *You have been invited to be part of this research because you are Bachelor of Indigenous Knowledge Systems undergraduate students at North-West University and University of Venda*
- *You hold teaching and learning experiences as you were exposed to Covid-19 while learning the course.*
- *You will unfortunately not be able to take part in this research if you are a postgraduate student at Indigenous Knowledge Systems Centre.*

What will be expected of you?

- *You will be expected to take part in Lekgotla (focus group interviews) to share your opinions and experiences with the researcher regarding the change of pedagogy from face-to-face to online vice-versa during their academic years. Please note that the Lekgotla will not take more than 90 minutes and you are the ones who are in charge of the mode of communication on how to hold Lekgotla (online or face-to-face). These options will be informed to the researcher when you agreed to partake in this study and filling in the demographic form. Each Lekgotla will constitute 5 participants each in connection with the level of academic years.*
- *You will be expected to fill in the survey questionnaires after Lekgotla. Please note that the survey will be completed online, and it will take you not more than 15 minutes to complete.*
- *You will be expected to inform the researcher about your daily/weekly/monthly schedule so that the dates and times for Lekgotla can be put on schedule for a feasible research process.*
- *Participants have the right to choose not to answer questions during interviews and withdraw from the study at any time.*
- *You will be expected to respect all participants' opinions and value their perspectives as the researcher will do the same to you.*
- *You will be expected to share your contact information with the researcher for member checking purposes.*

Will you gain anything from taking part in this research?

- *The gains for you if you take part in this study will be earning research skills and knowledge through observation and participation since you are a student will be conducting research for the completion of your degree. You will learn how qualitative and quantitative data is collected in academic research for your academic benefit. Should Lekgotla be held longer than expected due to inconveniences, the researcher will provide refreshments for participants participating face-to-face. Please note that there will be no direct gains for you in the study such as money or material gains.*
- *The researcher is not yet employed but will ensure that the needs of the research and participants are taken care of. For example, when Lekgotla is done online and participants have shortage of data, the researcher will purchase data for participants to be part of Lekgotla in an online mode.*
- *The other gain of the study is for other students who are going to study bachelor of indigenous knowledge systems in the future because they will use your experiences as lessons and solutions to their academic, social and personal problems. The university will benefit from your experiences in terms of policy making for teaching and learning. Your experiences also persuade the university to set out policies that resolves your academic challenges for academic excellence.*
- *The researcher is a mentor, therefore as we get done with Lekgotla, the researcher will help you with academic work challenges as this is a chance for you to engage with the researcher as he will share academic experiences with you and help you overcome your challenges.*
- *There will thus be no costs involved for you if you do take part in this study.*

Are there risks involved in you taking part in this research and what will be done to prevent them?

- *There are no physical, psychological, financial, economic, social or any nature of risks that you will experience either than inconvenience or discomfort. The risks to you in this study are that you might reflect to past experiences that are bad and uncovering painful memories about how Covid-19 affected your academic, social, and personal livelihood but will be limited by not asking you sensitive questions and giving you an opportunity to speak your heart out about your past experiences as a way of healing from those wounds.*

- *Once more, you have every right not to answer questions that you feel are making you uncomfortable during Lekgotla.*
- *The researcher will ensure that participants are well taken care of especially if the researcher notices emotional challenges, they passed through about their experiences by helping them to book for counselling services at the university.*
- *There are more gains for you in joining this study than there are risks.*

How will we protect your confidentiality and who will see your findings?

- *Anonymity of your findings will be protected by reporting data with the use of 'Participant 1, 2, 3, 4, 5 instead of identifying you by personal identity and during Lekgotla, you will be recorded voice and videos and pictures will be captured and using the pictures in the report, the researcher will blur faces in pictures to ensure that participants are not recognized by public.*
- *Your privacy will be respected by ensuring that your personal information is kept a secret by the researcher. These includes filled demographic information forms, signed prior and informed consent and non-disclosure will not be share with anyone except supervisors.*
- *Your results will be kept confidential by keeping filed notes in a safe locked cupboards in the researcher's workstation so that no one can access them.*
- *Results that are in the electronic form such as voice and video recordings including pictures taken during Lekgotla will be safely preserved in the drive with password only known by the researcher and no one will have access to the data except the supervisors since they are part of the study.*
- *Only the researchers and supervisors will be able to look at your findings*
- *As soon as the soft-copies of data is transcribed, it will then be deleted from the drive and hard-copies will be burned after a period of 3 years.*

What will happen with the findings or samples?

- *The findings of this study will only be used for this study and the researcher wishes to publish journal articles out of the entire study. The journal articles will be published with relevant Conferences to teach people about your experiences.*

How will you know about the results of this research?

- *We will give you the results of this research when the dissertation is being graded by sending you soft copies via emails.*

- Should the abstracts developed from the dissertation be accepted in conferences, the researcher will invite all participants to attend the conferences while presentations commence so that they become part of the experience of teaching and learning during presentation of findings.
- The researcher will ensure that Conference papers published are accessed freely by all participants.
- You will be informed of any new relevant findings by member checking since the relationship stay and continue to grow even after the research is done.

Will you be paid to take part in this study and are there any costs for you?

This study is not funded by any organization and the researcher is not yet permanently employed, therefore there are no monetary benefits for participation in this study. However, should you need anything such as data and refreshments during data collection process, the researcher will ensure that such urgent needs are taken care of.

You had no travel expenses and do not to be refunded for traveling because the study will be conducted in the university's premises where all students study and spend their time at. Participation in this study will not cost you any cent but time.

Is there anything else that you should know or do?

- if you have any further questions or have any problems, you can contact the researcher at semenyakapsell@gmail.com or Whatsapp on 0711824868 since you are familiar with the online platform of communication.
- You can also contact the research supervisor Dr M. Koitsiwe on Motheo.Koitsiwe@nwu.ac.za, Co-supervisors Dr J. Makhanike on justice.makhanikhe@univen.ac.za
- You can also contact the NWU-Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 1206 or carolien.vanzyl@nwu.ac.za if you have any concerns that were not answered about the research or if you have complaints about the research.
- You will receive a copy of this information and consent form for your own purposes.

Declaration by participant

By signing below, I agree to take part in the research study titled: **A Comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa.**

I declare that:

- I have read this information/it was explained to me by a trusted person in a language with which I am fluent and comfortable.
- The research was clearly explained to me.
- I have had a chance to ask questions to both the person getting the consent from me, as well as the researcher and all my questions have been answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be handled in a negative way if I do so.
- I may be asked to leave the study before it has finished, if the researcher feels it is in the best interest, or if I do not follow the study plan, as agreed to.

Signed at (*place*) on (*date*) 20....

.....
Signature of participant

.....
Signature of witness

Declaration by person obtaining consent

I (*name*) declare that:

- I clearly and in detail explained the information in this document to
.....
- I did/did not use an interpreter.
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I gave him/her time to discuss it with others if he/she wished to do so.

Signed at (*place*) on (*date*) 20....

Signature of person obtaining consent

Declaration by researcher

I (*name*) declare that:

- I explained the information in this document to **or** I had it explained by who I trained for this purpose.
- I did/did not use an interpreter
- I encouraged him/her to ask questions and took adequate time to answer them or I was available should he/she want to ask any further questions.
- The informed consent was obtained by an independent person.
- I am satisfied that he/she adequately understands all aspects of the research, as described above.
- I am satisfied that he/she had time to discuss it with others if he/she wished to do so.

Signed at (*place*) on (*date*) 20....

.....
Signature of researcher

Current details: (23239522) G:\My Drive\9. Research and Postgraduate Education\9.1.5.6 Forms\HREC\9.1.5.6_NWU-HREC_ICF_Template_Feb2019.docm
18 November 2022
File reference: 9.1.5.6

6.9 Non-disclosure agreement



Title: A comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa.

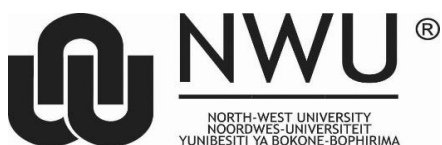
This Nondisclosure Agreement (the "Agreement") is entered into by and between _____ with intended participants _____ ("Disclosing Party") and _____, located at _____ ("Receiving Party") for the purpose of conducting research on "**A Comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa** " preventing the unauthorized disclosure of Confidential Information as defined below.

Exclusions from Confidential Information. Receiving Party's obligations under this Agreement do not extend to information that is: (a) publicly known at the time of disclosure or subsequently becomes publicly known through no fault of the Receiving Party; (b) discovered or created by the Receiving Party before disclosure by Disclosing Party; (c) learned by the Receiving Party through legitimate means other than from the Disclosing Party or Disclosing Party's representatives; or (d) is disclosed by Receiving Party with Disclosing Party's prior written approval.

Obligations of Receiving Party. Receiving Party shall hold and maintain the Confidential Information in strictest confidence for the sole and exclusive benefit of the Disclosing Party. Receiving Party shall carefully restrict access to Confidential Information to employees, contractors, and third parties as is reasonably required and shall require those persons to sign nondisclosure restrictions at least as protective as those in this Agreement. Receiving Party shall not, without the prior written approval of Disclosing Party, use for Receiving Party's benefit, publish, copy, or otherwise disclose to others, or permit the use by others for their benefit or to the detriment of Disclosing Party, any Confidential Information. Receiving Party shall return to Disclosing Party all records, notes, and other written, printed, or tangible materials in its possession of Confidential Information immediately if Disclosing Party requests, it in writing.

Integration. This Agreement expresses the complete understanding of the parties with respect to the subject matter and supersedes all prior proposals, agreements, representations, and understandings. This Agreement may not be amended except in a writing signed by both parties.

6.10. North-West University Faculty of Natural and Agricultural Sciences Research Ethics Committee (NWUFNAS-REC) clearance certificate



Private Bag X1290, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Fax: 018 299-4910
Web: <http://www.nwu.ac.za>

Senate Committee for Research Ethics
Tel: 016 910 3446
Email: Feziwe.Mseleni@nwu.ac.za

ETHICS APPROVAL LETTER OF STUDY

Based on approval by the **Faculty of Natural and Agricultural Sciences Ethics Committee (FNAS-REC)**, the Faculty of Natural and Agricultural Sciences Ethics Committee hereby **approves** your study as indicated below. This implies that the North-West University Senate Committee for Research Ethics (NWU-SCRE) grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Study title: A Comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa															
Study Leader/Supervisor: Dr MT Koitsiwe															
Student: KK Semanya															
Ethics number:	N	W	U	-	0	1	2	4	2	-	2	3	-	A	9
	Institution				Study Number					Year		Status			
<i>Status: S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation</i>															
Application type:	Single				Risk Category:	Minimal									
Commencement date:	23/03/2023														
Expiry date:	23/05/2024														
Approval of the study is initially provided for a year, after which continuation of the study is dependent on receipt and review of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation.															

Special in process conditions of the research for approval (if applicable):

- The following documentation are archived by FNASREC and should be complete and kept up to date:
 - Research proposal
 - Signed approval from the scientific committee indicating the proposed risk category
- All researchers involved in the study should submit signed NWU code of conduct statements annually.
- All researchers of low risk studies should submit proof of relevant ethics training every two years.
- All researchers that take part in activities that pose a safety and security threat to the researchers or the environment should submit a risk assessment form annually.
- All research involving human interaction should follow best ethical practise and keep documents as proof. This includes informed consent, questionnaires, incorporation of risk-benefit, and responsible data management.
- Any research at governmental or private institutions, permission must still be obtained from relevant authorities and provided to the FNASREC. Ethics approval is required BEFORE approval can be obtained from these authorities.

Special conditions:

Researchers need to apply to the NWU gatekeeper to obtain approval to use students as participants. Separate approval for the University of Venda would also be required. The best practices with regards to interviews should be implemented, including proper negotiation of access to participants; representative sampling; documented informed consent that includes the important elements; alignment of information collected with research questions; anonymization of collected information, ensuring the integrity and security of all data collected. Find more information about the NWU Research Data Gatekeeper Committee here: <http://services.nwu.ac.za/research-support/research-data-gatekeeper-committee>

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, the following general terms and conditions will apply:

- The study leader/supervisor (principle investigator)/researcher must report in the prescribed format to the FNASREC:
 - annually (or as otherwise requested) on the monitoring of the study, whereby a letter of continuation will be provided, and upon completion of the study; and
 - without any delay in case of any adverse event or incident (or any matter that interrupts sound ethical principles) during the course of the study.
- The approval applies strictly to the proposal as stipulated in the application form. Should any amendments to the proposal be deemed necessary during the course of the study, the study leader/researcher must apply for approval of these amendments at the FNASREC, prior to implementation. Should there be any deviations from the study proposal without the necessary approval of such amendments, the ethics approval is immediately and automatically forfeited.
- Annually a number of studies may be randomly selected for an external audit.
- The date of approval indicates the first date that the study may be started.
- In the interest of ethical responsibility, the NWU-SCRE and FNASREC reserves the right to:
 - request access to any information or data at any time during the course or after completion of the study;
 - to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process;
 - withdraw or postpone approval if:
 - * any unethical principles or practices of the study are revealed or suspected;
 - * it becomes apparent that any relevant information was withheld from the FNASREC or that information has been false or misrepresented;
 - * submission of the annual (or otherwise stipulated) monitoring report, the required amendments, or reporting of adverse events or incidents was not done in a timely manner and accurately; and / or
- FNAS-REC can be contacted for further information or any report templates via Roelof.Burger@nwu.ac.za 018 299 4269

The FNASREC would like to remain at your service as scientist and researcher, and wishes you well with your study. Please do not hesitate to contact the FNASREC or the NWU-SCRE for any further enquiries or requests for assistance.

Yours sincerely,



Prof Roelof Burger
Chairperson Faculty of Natural and Agricultural Sciences Ethics Committee (FNASREC)

6.11. North-West University Data Gatekeeping Committee (NWU-DGC) permission letter



Private Bag X6001, Potchefstroom

South Africa 2520

Tel: +2718 299-1111/2222

Web: <http://www.nwu.ac.za>

Research Data Gatekeeper Committee

NWU RDGC PERMISSION GRANTED LETTER

Based on the documentation provided by the researcher specified below, on **19-April- 2023** the North-West University (NWU) Research Data Gatekeeper Committee (NWU-RDGC) hereby **grants permission** for the specific project (as indicated below) to be conducted at the NWU:

Project title: A Comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa.

Project leader: Dr MT Koitsiwe

Researcher/Project Team: Mr. KK Semanya

Ethics reference no: NWU-01212-22-A9

NWU RDGC reference no: NWU-GK-23-130

Specific Conditions:

1. Please provide additional information on the recruitment process for participants.
2. Please explain in more detail how informed consent will be obtained from participants for the focus group discussion?
3. Please clarify whether the demographic information form is part of the survey or just a screening process for potential participants?
4. Where will the survey take place online or in person, please clarify.

Approval date: 19-April- 2023

Expiry date: 20-April- 2024

General Conditions of Approval:

- The NWU-RDGC will not take the responsibility to recruit research participants or to gather data on behalf of the researcher. This committee can therefore not guarantee the participation of our relevant stakeholders.

- Any changes to the research protocol within the permission period (for a maximum of 1 year) must be communicated to the NWU-RDGC. Failure to do so will lead to withdrawal of the permission.
- The NWU-RDGC should be provided with a report or document in which the results of said project are disseminated.

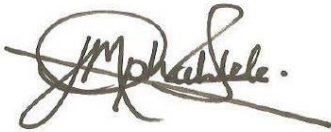
1

- Due to the COVID-19 pandemics the Committee would like to advise the researcher to practice the necessary caution and adhere to the National Covid-19 Guidelines when conducting research with participants.

Please note that under no circumstances will any personal information of possible research subjects be provided to the researcher by the NWU RDGC. The NWU complies with the Promotion of Access to Information Act 2 of 2000 (PAIA) as well as the Protection of Personal Information Act 4 of 2013 (POPI). For an application to access such information please contact Ms Annamarie De Kock (018 285 2771) for the relevant enquiry form or more information on how the NWU complies with PAIA and POPI.

The NWU RDGC would like to remain at your service as scientist and researcher and wishes you well with your project. Please do not hesitate to contact the NWU RDGC for any further enquiries or requests for assistance.

Prof Jeffrey Mphahlele



Chairperson NWU Research Data Gatekeeper Committee

Original details: (22351930) C:\Users\22351930\Desktop\test 2.docm
13 November 2018

Current details: (22351930) M:\DSSI\8533\Monitoring and Reporting Cluster\Ethics\Applications RDGC\Updated RDGC Permission Letter.docm
15 November 2018

File reference: 1.1.4.3

6.12 Permission letter from University of Venda

Research and Innovation
Office of the Director

Date: 02nd May 2023

Mr KK Semanya (31159850)
North-West University
Mahikeng
2745

Email: semenyakapsell@gmail.com

Dear Mr. Semanya

Permission to conduct Research at the University of Venda

You are hereby granted permission to conduct research at the University of Venda.

The research will be based on your Masters research title: *"A Comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa"* registered at the North west University.

Approval period: **May 2023 – May 2024**

Supervisor: Dr M. Koitsiwe (North-West University)
Co - supervisor: Mr M. Diratsagae (North-West University)
Co - supervisor: Dr J. Makhanike (University of Venda)

The conditions are that all the data pertaining to the University of Venda will be treated in accordance with the Ethical Principles and that will be shared with the University upon completion of the project. In addition, consent should be sought by you as a researcher from participants.

Attached is our policy on ethics.

Thank you.



.....
Prof VO Netshandama

Chairperson: UREC

Cc: Prof N Feza (DVC Research and Postgraduate Studies)
Cc: Senior Prof GE Ekosse (Director Research and Innovation)
Cc: Prof MS Mashau (Chairperson RESSC)



University of Venda

UNIVERSITY OF VENDA
PRIVATE BAG X5050, THOHOYANDOU, 0950. LIMPOPO PROVINCE. SOUTH AFRICA
TELEPHONE 015 962 8313 / 8504. FAX 015 962 9060
Email: research@univen.ac.za

"The University of Venda produces graduates that are locally relevant and globally competitive"

6.13. North-West University Statistical Consultation letter



Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222

Web: <http://www.nwu.ac.za>

Statistical Consultation Services

Tel: +27 18 299 2651

Fax: +27 0 87 231 5294

Email: Erika.fourie@nwu.ac.za

17 February 2023

Re: A Comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa, Mr KK Semanya (31159850)

We hereby confirm that the Statistical Consultation Services of the North-West University assisted with the planning of the above mentioned project.

Kind regards

A handwritten signature in black ink that reads 'E Fourie'.

Dr E Fourie

Senior Consultant: Statistical Consultation Services



Private Bag X2046, Mmabatho
South Africa, 2735
Tel: 018 389-2111
Fax: 018 392-5775

School of Communications Studies

Tel: 018 389 2438

Fax: 018 389 2504

Email: chilombo.mbenga@nwu.ac.za

03 AUGUST 2023

6.14 Language editing certificate

Dear Sir/Madam,

RE: LANGUAGE EDITING CERTIFICATE: KK SEMENYA

This is to certify that the following journal article entitled “**A comparative analysis on impact of Covid-19 on Bachelor of Indigenous Knowledge Systems students in South Africa**”, commissioned to me (Dr Chilombo Banda), by Mr KK Semenya has been edited for English language, grammar, and punctuation and spelling on 03 August 2023.

Disclaimer: the author is free to accept or reject changes made in the document after editing. However, I do not bear responsibility to revisions made to the document after editing is done.

Yours Sincerely,

Dr Chilombo Mbenga-Banda
Programma Leader/Subject Chair
BA, BA Communication Hons (NWU), MA (UCT), PhD (NWU)
School of Communication Studies
North-West University, Mafikeng Campus
Email: Chilombo.Mbenga@nwu.ac.za
Tel: 018-389-2438
Cell: 0791788697

6.14 Proof of Conferences attended and publication

(a) 19th Annual National Oral History Conference 2022



ORAL HISTORY ASSOCIATION OF SOUTH AFRICA

NPO Reg No: 131 -224, NATIONAL ARCHIVES OF SOUTH AFRICA, P/BAG X236, PRETORIA 0001, SOUTH AFRICA,

Tel: 012 441 3200

Dear Kapsell Kwena Semenya

Re: OHASA 2022 Conference

This letter indicates formal acceptance of your paper **“The Impact of Covid-19 on Teaching and Learning of the Bachelor of Indigenous Knowledge Systems: Voices and Perspectives from North-West University students.”** for the 19th Annual National Oral History conference organised by the Oral History Association of South Africa (OHASA), in conjunction with the National and Provincial Departments of Sport, Arts and Culture, to be held in Kuruman in the Northern Cape from 11 to 14 October 2022. ***Please note that this is a physical conference only and presentations can therefore not be done virtually.***

Your presentation time shall be limited to a maximum of 20 minutes irrespective of the number of speakers; this will be followed by questions and discussions after the session in which you participated. PowerPoint presentation facilities will be available for those who need them. Sound bites from interviews and visuals are encouraged within the presentation time. Please prepare your papers for publication in the Harvard referencing style submit it on or before the conference to the OHASA editor, Prof. Christina Landman, at christina.landman2@gmail.com and Tanya Pieterse at tanyapiet247@gmail.com.

Please complete the attached conference registration form and return the completed form as well as receipt/proof of payment of conference fees to officials indicated on the forms attached as soon as possible. Please note that all conference participants will be responsible for their own accommodation and transport arrangements.

Participants are encouraged to apply for membership of OHASA and participate in the AGM to be held on the third day of the conference.

Yours Sincerely OHASA LOC

EXCO MEMBERS: Prof Sekgothe Mokgoatšane (President), Tshitso Challa (Deputy President), Viwe Sibanga (Secretary), Charity Mbewe (Deputy Secretary), Boitsheko Thwane (Treasurer), Maite Manganye (Promotions & Publicity), Ntsimane Radikobo (Research & Development), Prof Christina Landman (Editor), Dr Kogie Archery (Sub-editor), Adv. Dennis Maake (NARSSA)

(b) 20th Oral History Association of South Africa



sport, arts & culture

Department:
Sport, Arts and Culture
REPUBLIC OF SOUTH AFRICA



GAUTENG PROVINCE
SPORT, ARTS, CULTURE AND RECREATION
REPUBLIC OF SOUTH AFRICA



ORAL HISTORY ASSOCIATION OF SOUTH AFRICA

NPO Reg No: 131 -224, NATIONAL ARCHIVES OF SOUTH AFRICA, P/BAG X236, PRETORIA 0001, SOUTH AFRICA,
Tel: 012 441 3200

OHASA CONFERENCE - 9 to 13 OCTOBER 2023

Dear Kapsell Kwena Semanya,

You are hereby informed that your paper **“Epidemics, Pandemics and Disasters”** has been accepted for presentation at the 20th Annual National Oral History conference hosted by the National Archives and Records Service of South African in partnership with the Oral History Association of South Africa (OHASA) and the Gauteng Provincial Archives. The conference is to be held at the Maropeng Cradle of Humankind World Heritage Centre (on the R400 off the R563, Hekpoort Road, Sterkfontein). ***Note: the mode of this conference is by means of physical attendance only, and presentations can therefore not be done virtually.***

Your presentation time shall be limited to a maximum of 20 minutes, irrespective of the number of speakers, which will be followed by questions and discussions after the session in which you participated. Facilities will be available should you wish to also present your paper in a PowerPoint format. Sound bites from interviews and visuals are encouraged within the presentation time. Please prepare your papers and submit it by **15 September 2023** to the Editor and Head of Publications: OHASA, Prof. Christina Landman, at christina.landman2@gmail.com and to Tanya Pieterse at ohasaconference@gmail.com. Please follow the guidelines attached on the required format and referencing style in preparation your paper.

Kindly complete the attached Delegate Registration form and return the completed form as well as receipt/proof of payment of conference fees to the officials indicated on the form, as soon as possible. Please note that all conference participants will be responsible for their own accommodation and transport arrangements. Accommodation options in the area will be sent soon.

Participants are encouraged to apply for, or renew their OHASA membership (forms attached) and participate in the Annual General Meeting to convene during the conference.

Yours Sincerely

Editor and Head of Publications: OHASA

26 June 2023

EXCO MEMBERS: Prof Sekgothe Mokgoatšane (President), Tshitso Challa (Deputy President), Viwe Sibanga (Secretary), Charity Mbewe (Deputy Secretary), Boitsheko Thwane (Treasurer), Maite Manganye (Promotions & Publicity), Ntsimane Radikobo (Research & Development), Prof Christina Landman (Editor), Dr Kogie Archery (Sub-editor), Adv. Dennis Maake (NARSSA); Miss K. Ngcobo (Ex-officio - NARSSA)

(c) Certificate of attending Basic Oral History Training Workshop



Certificate of Attendance

This is to certify that

Kapsel Kwena Semenya

attended the Basic Oral History Training
Workshop on the 10 October 2022

Prof Sekgothe Mokgoatsana
OHASA President

Date: 10 October 2022



sport, arts & culture

Department:
Sport, Arts and Culture
REPUBLIC OF SOUTH AFRICA



sport, arts & culture

Department:
Sport, Arts and Culture
NORTHERN CAPE