

# Successes and Challenges in Higher Education Teaching and Learning

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## Abstract

Higher education globally has been affected with Covid-19 pandemic which majorly affected the academic year in 2020. Although some institutions still delivered their lectures online in 2021 and 2022. This paper dealt with successes and challenges of higher education teaching and learning before Covid-19, during Covid-19 and the way forward after the pandemic. This paper is a desktop review paper that has put into consideration the authors experiences before, during and after the pandemic. The paper also looked at the global objective while it put into consideration the Sustainable Development Goal (SDG) 4 which dealt with the education sector. The next thing that was dealt with in this paper is the massification which helped to address the South African challenges and how they were tackled. The role of technology was also written about and the challenges were dealt with. The latter part of this paper also looked at cheating during online assessments and also recommending that all contact lectures must be recorded so that students can have access to the lecture clip at any point in time. This can enhance their performance and increase the success of teaching and learning / pass rate. These are some of the future recommendation that can be considered. This paper also provided some recommendation that can be utilized in future so that both lectures and students are well equipped and prepared for the unknown.

**Keywords:** Higher Education, Covid-19, Teaching and Learning, SDG 4, Online, Assessment.

## 1. Introduction

The advent of democracy in South Africa has created a need for transformation in the provision of services this then enabled the establishment of redress interventions, for the reparation of many sectors including the educational inequalities that were

prevalent in the higher education and training sector during the apartheid regime. The redress interventions included the widening of doors to enter the higher education and training for black, Indian, and Coloured students who before that had limited opportunities to access the sector, but mostly the black majority, who lacked a proper secondary education as the apartheid basic education system compromised the standard or quality of education the black majority received, this was to weaken their matric results and preventing them from qualifying for university entry. The redress interventions allowed the previously disadvantaged groups to be admitted to universities without being discriminated against for their weak matriculation results (Makura, et al., 2011). This was done to get rid of elitism in the higher education and training sector leading to the massification of the sector.

This transformation resulted in institutions previously known as designed for white students starting to admit several black students. This necessitated that universities also develop institutional-based interventions that would improve the academic performance of the previously disadvantaged students, to meet the performance standards of these institutions. The interventions ranged in areas such as Language, writing, supplemental instruction and tutoring programmes. Mdepa and Tshiwula (2012) postulate that the institutional interventions or academic support programmes were intended to bridge the gap between the groups that received quality basic education which was predominantly the white group and the black groups which their basic education did not or was limited their preparedness for university expected performance standards. Daily-Davis (2021) confirms this saying that the academic support was to assist the underprepared students through programmes such as tutorials. Filling the gap between their poor socio-economic background and now higher education standard. Looking at the status quo of the higher education sector in South Africa it becomes evident that the efforts and interventions put in place to provide education that is inclusive and comprehensive in nature, improve the quality of education, and provide the labour market with highly equip labour force, are not progressing as anticipated. despite the number of interventions programmes which have been introduced. It could be said that the focus on the redress, instead of preparing for the future needs and possible changes is the reason the Higher education sector was hardly hit by critical events such as the pandemic covid-19 and many other un-resolved and emerging challenges faced by the higher education sector. It becomes critical to note that the challenges faced by the South African higher education and training sector are closely related to wider challenges facing South Africa which includes: poor economic growth, high youth unemployment and the paralyzing effect of the poor leadership of the ANC government. The crisis faced by South Africa causes distress in different sectors and is demonstrated by rising protests. This includes protests seen at South African universities year after year. These students' protests to a certain extent present a picture of the reality of the higher education and training sector challenges on the ground. The student protests have become a part of the symptom of South Africa's higher education sector ills and not necessarily for transformation (Tjønneland 2017). The South African government seem to be good at drawing good looking interventions and outlining a way forward, however, the biggest challenges emanate from implementation and insufficient

capacity, as seen in the failure of addressing several critical incidents which provide an insight into the understanding of key issues of successes and challenges in higher education (Chetty & Pather 2015).

This assessment analyses the critical incidents which provide an insight into the understanding of key issues of successes and challenges in higher education. The selected issues reflect the three levels namely: macro-level at the society level, meso level at an institutional level, and micro-level at the personal level between staff and students. This write-up discusses the role of Sustainable Development Goals(SDGs), massification and use of technology. This discussion will begin by taking a look at the global objectives for the higher education sector, then discuss the massification of the institutions of higher learning and training, and lastly, discuss the use of Technology in the higher education sector for teaching and learning.

## **2. Literature review**

### **2.1 Global Objectives**

In addressing the challenges faced by the institution of higher education the united nation developed the Global goals known as sustainable development goals 2030 (SDGs). In the creation of these global goals, SDG 4 was developed with a close focus on the educational sector. The SDG 4 highlights the significance of strengthening empirical and conceptual understanding of the role of the higher education sector in the achievement of SDGs (Avelar et al., 2019). The SDG 4 advocates for equal access to higher education and training, as a way of encouraging lifelong learning opportunities for all and improving the human capital (Owens, 2017). On the other hand, it's important to understand the critical role of the higher education sector to champion the realization of sustainable development goals, 2030 as a whole through human formation, knowledge production and innovation. This task extends to the special role of higher education institutions to provide the necessary research for the achievement of the SDGs. This sector holds a long-standing history, of playing a critical role in knowledge creation through research and more recently the responsibilities of community engagement Leal Filho et.al.(2019). There are countless examples of universities innovatively engaging in global challenges with the communities. The University of Pretoria serves as an example of a university that engaged in innovative strategies to address at the continental level through research focusing on food security. Another example is the Ahfad University for Women (Sudan) which provides courses, and research on-the-job training and community engagement activities (Sheldon 2016).

The SDG 4 target 10 outlines that by 2030, all learners should have equal access, be included, attend safe schools, increase scholarships for higher education, education should be lifelong and there should be an increase in the number of people with relevant skills, numeracy and literacy. Furthermore, Target 4.7 provides that students should “acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotions of

a culture of peace and nonviolence, global citizenship and appreciation of cultural diversity and culture's contribution to sustainable development.

These goals and targets advocate for the attainment of skills and knowledge towards global citizenship education as a critical aspect of the sustainability of society. This includes tolerance of diversity, solidarity, and humanity. These advocates for the global competent provision of education, producing students that are socially responsible, responsive and engaged in the development of their communities (Upvall & Luzincourt, 2019). The higher education institutions are expected to include principles of global competent education in the curriculum development as the strategy to contribute toward global competency and general good in the society. However, many challenges have faced the South African higher education sector threatening the achievement of the educational goals including the advent of the covid-19 pandemic. This pandemic has led to a global crisis which did not only place questions on the business of the sector of teaching and learning but also on the universities' role in the society, to provide feasible solutions. It is important to acknowledge that some of the world's leading universities were at the forefront in; providing research towards the development of the vaccines to curb the spread of the virus, reporting on the wide impact of the pandemic on the society, and advising governments on recovery strategies from the pandemic.

Also, other institutions of higher learning suffered a severe blow in conducting their core business of teaching migrating their courses to online platforms. Many countries especially the developing countries lacked sufficient resources to fund the higher education sector, this exacerbated the challenges faced by the sector, and this comes as a result of the government prioritising other sectors over higher education in terms of expenditures. However, even the well-resourced institutions some dynamics served as impediments in the conducting of their core business. Higher education institutions are committed to the course of sustainable development, however, they encounter many challenges that threaten the values of the sector such as social justice and solidarity, and a promising vision for the future in the post-pandemic.

## **2.2 Massification**

South African institutions of higher education came to develop and put measures in place to provide inclusive education, increasing the enrolment of black students in the sector. This need came as a result of a gap that existed between black graduates and other races, to grow the economy and redress inequalities and socio-economic injustice caused by colonialism and segregation policies a change in approach was needed and this called for redress measures. since the advent of democracy higher education sector has been seeking to enhance the black students' enrolment in the sector.

To jog back the readers' memory: The policies enacted by the apartheid government did not only segregate the whites from blacks, and all other races but they were very discriminative and excluded blacks from the development initiatives and programs. The apartheid regime established separate systems of education based on race, this

served as a bearer for black students in accessing higher education institutions, good quality education and employment compared to their white peers. upon the advent of the democratic dispensation in 1994, the black South Africans' enrolment in higher education institutions significantly increased. This came as a result of the redress policy provision of sponsoring academically excelling students from the previously disadvantaged groups which happen to be the black group and from low-income families and the development of academic support programmes for underprepared black students who have received a poor quality education in the basic education level in poorly resourced formerly black public schools. This recognises the need to establish an inclusive environment in the higher education sector, particularly in those institutions that were previously demarcated as white universities (those universities that were meant for white students only).

Gore (2021) asserts that South African universities need to create campus environments that are sensitive to racial, socio-economic and cultural diversity". This came as an acknowledgement that the previously disadvantaged black students from poor socioeconomic backgrounds would face a difficult time adjusting to the institutions that were established only for the white and middle-class students. Nevertheless, despite all the efforts that have been put to ensure that the number of black students enrolled in the sector increases, inequities are still prevalent and their impact continues in the higher education sector. According to the Department of Higher Education and Training 2019, 62-73 report, "white students have close to double the chance of graduating than African students. This raises the question of whether universities are". The low black student enrolment and low completing rate serve as the reason the South African government saw the need for what is known as his discovery massification of the higher education sector. This discussion does not seek to suggest that massification of higher education was not necessary however it's important to highlight that the massification of the higher education sector lead to the overproduction (quantity) of university graduates over the production of quality graduates with the skills needed by the global and national labour markets which may demand graduates with the better result (distinction) or higher qualification levels.

In light of this; the challenges emanating from the massification of the South African higher education sector is "the inconsistency in admitting and progressing beyond the systemic contextual problems inherited from the apartheid government's educational policies to attain participatory parity" (Ngambi et al.,2016). The education system in both the basic and higher education sectors served as advocates of inequalities, consequently, the South African government intended to reverse the inequalities of the past in the higher education sector and provide equal opportunities for all to quality teaching and learning through massification. Before South Africa attained democracy and freedom, many countries in the world had moved from the elitism in the provision of education, particularly in the higher education sector, choosing the system of massification, especially the government-funded institutions, and still able to provide quality education, producing globally competitive graduates. Argued Lee (2016) South Africa also took the same path of massification in the education sector as a result South Africa's higher education has witnessed massification at a larger scale

creating opportunities for all without focusing on the education background and socio-economic factors. This means the generation of students, born after 1994 stand a chance of benefiting from this massification and equal educational opportunities for all.

The issue of widening doors in the higher education sector was one of the great concerns it was seen as urgent, especially for the previously disadvantaged groups. The report of UNESCO (1997) on the condition of African education described this sector as the head of the education system as a whole. Emphasizing the importance of open access in the higher education institutions that all citizens must have equal access, taking into consideration the principles of merits and regardless of gender, religion, ethnicity or socio-economic background, this justifies why South Africa had to develop interventions that would enable wide access to higher education in South Africa.

In meeting all the standard requirements of the removal of elitism in the higher education sector and moving to massification one principal challenge remains in the South African higher education sector creating a higher demand for higher education, and that challenge is the government's financial muscle to provide adequate funding and resources to meet the growing demands of the institutions of higher learning and students enrolled in these institutions. The National Plan on Higher Education (NPOHE), serves as one of the most important policy plans in the higher education sector outlining the policy goals that are important in the funding of the South African higher education sector. This includes producing high-quality graduates for the labour market that is necessary for South African socio-economic growth (Graham et al 2019), hence the massification of higher education.

Scott (1995) describes "massification as the mass adaptation of a phenomenon by the suppression of its distinguishing features". Within the parameters of this discussion and higher education massification can be understood as the massive increase of student enrolment in the higher education sector that occurred in the 21st century and in South Africa preceding the 1994 democratic elections. This can be debated; access to higher education institutions, or receiving higher education is seen by many people as a critical factor in the development of the economy and eradicating social ills faced by South Africa. Higher education without a question plays a significant role in facilitating nation-building, solidarity, and socio-economic development, apart from inspiring social cohesion and confidence in social institutions, and also inspiring democratic principles in participation through wide conversations. Another argument to this suggests that institutions of higher education facilitate tolerance of diversity in gender, ethnicity, religion and social class. These play a significant role in human capital development, sustaining economic growth, restructuring society and promoting national unity (Motala & David 2020).

Given the persistent prevailing socio-economic inequalities which are undeniably visible in South Africa. The democratic South African government has always been pro massification of the higher education and training sector. This means that the

curriculum policy moved from a rigid approach that accommodated only the elites in the past to flexible methods that accommodated the massification where the choice of program is the total collapse of sequencing, structure, and assessment requirements (Trow 2016).

This massification has seen an increase in the access to higher education institutions and this has to a certain extent improved the scope of equity and equality in South Africa, a country where the provision of higher education and training was biased by the racial factors and social status. However, despite the massification efforts by the South African government the worthiness of massification in higher education and its role in improving graduates' competitiveness in the labour market is beginning to be questionable (Mahabeer & Pirtheepal, 2019).

Despite the efforts to transform the higher education sector, after 1994, there are signs of increased distress in the sector (Mtshali & Sooryamoorthy, 2019). Outside of the South African challenges in the sector, this comes as a result of factors such as the competitive nature of the higher education sector globally, this places a load on the South African higher education system that is already challenged. Alemu (2019) postulates that there is a rise in the global pressure to develop knowledge, this will risk the gap created between the developed and the developing countries, and the gap will continue to widen. This leads to brain drain, as the large-scale emigration of highly skilled human capital, is already a major concern to society at large, and for the higher education and research community (Alemu, 2019). Despite the efforts to advocate for 'brain circulation' however, this will remain one of the major challenges in the decades to come faced by higher education, particularly in developing countries such as South Africa. The challenges and opportunities presented by this to developing countries such as South Africa are to define their roles and strategies for balancing the massification and internationalisation process (Sehoole, 2014:231).

### **2.3 Technology in higher education**

The Higher education sector globally has been greatly affected by the coronavirus COVID-19 pandemic this resulted in the emergency shutdown and implementation of social distancing measures (Toquero, 2020). This crisis was directly related to the health sector, however, the impact was felt in all sectors including higher education and training (Krishnamurthy, 2020). Several higher education institutions were compelled to establish interventions and measures that would contribute to the sustaining of the teaching and learning processes. These interventions and measures included but were not limited to the implementation of emergency remote teaching and learning, enabling staff to work from home centred environment arrangements, identifying alternative routes to provide the support needed by students and redirecting of funds to address the emerging demands presented by the covid-19 pandemic. This pandemic affected and altered the lives of students in many ways, including displacement from their campus environment which was comfortable and enabling them to meet the demands of higher learning, financial struggles, loss of bursaries and the compelling need to learn the use of new technologies on top of learning the curriculum and content of their modules (Govindarajan & Srivastava,

2020). From an operational viewpoint, some South African institutions of higher education had teaching and learning activities continuity plans in place as a result of lessons from the #feesmustfall protests that occurred in 2015/2016, which triggered a huge debate and rebellious and confrontational approach by the student, protesting against the exclusive nature of fee increment in South African higher education sector which presented the elements of elitism (Hlatshwayo & Fomunyam 2019)).

The violence demonstrated by students during these protests demanded that for sustainability or continuity of teaching and learning, operations be moved to online learning off-campus. There was curiosity around the applicability of the plans developed during the #feesmustfall protests as it was unclear if they were effective or could have played any role in preparing the higher education sector to deal with the unprecedented threats posed by the advent of the COVID-19 pandemic in the higher education sector that required teaching and learning to take place remotely off campus (Motala & Menon, 2020). According to Toquero (2020) in places like the Philippines, the level of unpreparedness for events such as covid-19 pandemic in institutions of higher learning was very high. This could be credited to them having not experienced shutdowns. A study conducted by Rashid and Yadav (2020) points out that there was no best practice or approach the higher education institutions could mimic, during the COVID-19 pandemic and there were no prescribed models to follow so this caused a crisis in the sector. Bryce et al. (2020) concede that the already existing, established or known crisis management tactics can be ineffective in responding to the advent of the unprecedented events and the sustainability of operations can be severely affected as clearly demonstrated during the advent of the Covid-19 pandemic.

According to Wangenge and Kupe (2022), the unfolding of the COVID-19 pandemic in South Africa is interwoven into an existing socioeconomic context ridden with poverty and deep, unsustainable inequalities. In line with this, the South African universities especially those based in rural areas such as the University of Zululand, and the University of FortHare are facing an uncertain future as deteriorating funds in the University was a challenge. This meant that such institutions had to consider several aspects of covid-19 pandemic management decisions and planning for the continuity of business leaving no student behind in a massified institution. The levels of isolation and social distancing varied, we saw the first level which was the hard lockdown, (which was characterized by strict isolation for people living, studying and working in South Africa. People relied on media, news, and social media for updates, on explanations of what was happening in the country and beyond, as they could not interact physically. It can be argued that these instruments of knowledge sharing provided a limited scope of what was transpiring, in an attempt to save the academic year and operationalize the institutions of higher learning and training. Therefore, to make sense of the challenges faced by the sector it becomes critical that the focus shift from what is presented by media or politicians about how the institutions of higher education were affected, but incorporate the main role-players that are students and lecturers who lived experiences of being isolated and moved to use technology for educational purposes, which can be understood as educational technology.

“There are various definitions of educational technology, a narrow definition refers to educational technology as or the effective use of technological tools in teaching and learning.”  
Govender & Khoza, (2017, p. 67)

A study conducted by Khoza, (2019) is pessimistic in its nature and groundbreaking in a concise definition of educational technology, that technology in education is the use of software and hardware resources in learning and technology education. In the context of this study: educational technology is the use of physical resources and online resources in the process of learning and the application of theory in the use of both physical resources and online resources for learning. The importance of the usage of technological tools is demonstrated in all the institutions of higher education. A study conducted by Coman, et al.(2020). provide an understanding of the idea of using education technology tools such as computers, mobile phones and others) for teaching and learning higher education courses confirmed this.

Moreover, a review by Ghavifekr and Rosdy (2015) shows that these tools provide opportunities to support students’ learning needs and strategic planning for maximum integration into the curriculum is necessary. This integration has been seen in developed universities over the past decades where tools of technical/ technological education have been included in the curriculum for effective teaching and learning (Khoza, 2019; Mpungose, 2019). This means in universities such as the University of Zululand where the majority of the students come from poor socio-economic backgrounds had to be provided with relevant technological devices to be part of the teaching and learning processes during the pandemic. The need to provide students with devices such as netbooks, iPads, webcams, laptops, desktop computers, mobile phones and other devices continues to increase in South African universities, especially for those students who cannot afford to purchase these devices.

A study conducted by Waghid (2018) reveals that the use of technological education has significantly made learning easier for students as they would find notes, videos of lectures teaching, and all information relating to the course stored in one place and easily accessible through the technological devices. This means that the accessibility of technological education resources enables students to use any available resources to access learning material. according to van der Heyde and Siebrits (2019) resources that are used for online learning include software packages such as Microsoft Office 365, Firefox, Chrome, social media platforms (WhatsApp, Twitter, Facebook), and learning management systems such as Moodle, and Canvas. A study conducted by Bates, (2018) reveals that the use of online learning to a certain extent is an effective way to bridge the gap of inequalities that exist between South African private and public institutions of higher education. This means the students who do not have access or knowledge on how to use educational technology for online learning are most likely to be incompatible in the work environment after receiving their qualification because these technical/ technological skills are necessary and applicable in the work environment. in addition to that Manca (2020) conducted a study looking into the use of social media in learning, the study found that Twitter and Facebook are

the most used social media platforms in higher education, in comparison with Instagram, WhatsApp, Snapchat and others. However, this is in contrast with the experiences that the writer has with Business Management students in remote learning and communication, WhatsApp was the most accessible online platform for most students, it allows controlled mass communication, easy for sharing study materials, videos, and voice recordings.

Clement (2020) argued that social media content is easily accessible as it works well with mobile devices such as cell phones, and laptops, and this simplifies students' lives. With all of the above being said on the integration of educational technology (learning management system and social media platform) with learning, digital divides remain a challenge, especially in rural-based institutions such as the University of Zululand. Van Deursen and van Dijk (2019) assert that these digital divides are a major challenge to the use of educational technology globally, arguing that the digital divides are a real challenge not only in developing countries but also in developed countries not only in terms of access to the Internet but also in terms of attitude, skills to use them. Institutions such as the University of Zululand face additional challenges on this, created by institutional capacity vs massification where the institution can only accommodate less than 6000 students but for enrolling over 17 000 students per year. This means even if the university can provide unlimited access to Wi-Fi on the campuses and devices such as laptops and cell phones, there are students residing in rental rooms or at their homes that do not have access to WI-FI and they are also exposed to high criminal infested areas with criminals targeting them for the electronic devices. For this reason, the alternative approaches should be explored by institutions and departments that are not a size fit all so that all students can have equal access to learning regardless of their geographical area, race, culture, and socioeconomic factors.

### **3. Discussion**

A study conducted by Rashid and Yadav (2020) points out that there was no best practice or approach the higher education institutions could mimic, during the COVID-19 pandemic and there were no prescribed models to follow so this caused a crisis in the sector. Approaches to be followed will be determined by the type of higher education institution. What might work for an Urban University might not work for a rural based University. Bryce et al. (2020) concede that the already existing, established or known crisis management tactics can be ineffective in responding to the advent of the unprecedented events and the sustainability of operations can be severely affected as clearly demonstrated during the advent of the Covid-19 pandemic. This particular pandemic that struck the world has taught us all a great lesson on how to work on flexibility of how curriculum is being delivered.

According to Wangenge and Kupe (2022), the unfolding of the COVID-19 pandemic in South Africa is interwoven into an existing socioeconomic context ridden with poverty and deep, unsustainable inequalities. Covid-19 also increased the poverty level as many were rendered jobless. In some area, Covid - 19 has actually increase the crime rate within the society.

Technology also played a very vital role, although some less privileged students were at really affected during this period because of inadequate internet facility and also less access to electricity. This means in universities in the rural area where the majority of the students come from poor socio-economic backgrounds had to be provided with relevant technological devices to be part of the teaching and learning processes during the pandemic

#### **4. Recommendation / Preparing for the unknown**

Technology training and full usage within the Universities is highly encouraged. This will enable the staff and students to be aware of these facilities and also learn how to handle such technology. Recording of Lectures and uploading on Learning Management System even during contact lectures is also a good idea to venture into by all Universities. This will enable students to have access to these recordings and study better compared to the contact lecture they have and might not be able to grasp the whole information that the lecturer has passed across. Universities Management should work on acquiring smart boards like the idea hub or something similar. There should be an initiative that can help curb / reduce cheating rate during assessments as this is one of the major problems of online assessments. There might be an agreement as to having lectures online and assessments physically.

Another avenue that can help is to have a Virtual office in place. This happens when the lecturer provides a link where students can consult and everyone that feels they need to will login to join the virtual consultation. The time and link will definitely be set and sent by the lecturer. Hybrid system of teaching should be part of the policy of higher education. This will help students to have knowledge of both type of lecture delivery platform. This makes both the lecturer and students to be aware of the system in place, Provision for students in rural areas is also a great thing that needs to be done. As the Minister of higher education said that all students must be carried along in the teaching and learning process and no student should be left behind. Curriculum redesign is also something that should be re-done so as to accommodate both online and contact lectures.

#### **5. Conclusions**

The institution of higher education has a responsibility of building inclusive environments and design interventions that would reduce inequality in higher education institutions and provide access to state resources. The sector needs to revisit the concept of previously disadvantaged, as skin colour is no longer enough, especially with the current generation entering the institutions of higher learning that were born in the millenniums, by parents who had different opportunities after the attainment of freedom, taking into consideration the inequalities that still exist in the socio-economic corridors. With that being said each institution needs to design its definition of previously disadvantaged as the policy of higher education policy entrusted institutions to be innovative and re-design interventions applicable to them for transformation improving access, participation and academic outcomes, especially to previously disadvantaged students.

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