

Navigating the Transition to Inclusive Online Learning in BRICS and Africa

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Abstract

In response to COVID-19 lockdowns, universities in Africa and BRICS nations swiftly transitioned from contact to online learning to maintain academic progress. This article explores critical questions these institutions must address to develop effective long-term online learning policies, rooted in Swartz's (2022) Navigational Capacities framework. It highlights the risk of deepening digital inequalities if the limitations of emergency remote learning are overlooked. Focusing on the experiences of the BRICS, Ghana, Uganda, and Ethiopia, the article analyses their online learning approaches during 2020 and 2021 amidst the pandemic. This analysis, through the Navigational Capacities lens, emphasises addressing key challenges such as technology access, affordability, and digital skills. Many universities initially transferred traditional teaching methods to online platforms without a pedagogical redesign to optimise digital tools, underscoring a need for a strategic shift. Going forward, universities must understand the requirements of an effective long-term online learning programme, weighing the economic costs of such an approach. Crucially, universities across BRICS and the Global South must continue to share knowledge about these experiences as they develop policies which define an effective long-term online learning programme.

Keywords

BRICS, Emergency Remote Teaching, Higher Education, Online Learning, South-South cooperation, Navigational Capacities Framework

JEL: A2, D8, F15.

Introduction

Background

In 2020, the rapid global lockdown that followed the advent of the COVID-19 pandemic necessitated an immediate shift in the learning model adopted by universities. Despite the advances in technology pre-COVID-19, there was no impetus to change the learning model in universities radically. The pandemic has acted as a catalyst, forcing universities to quickly evaluate how they migrate all staff to student engagements online and safely carry out the learning programme (Odoyo & Olala, 2020). However, while universities followed state-mandated instructions to cancel in-person tuition, all institutions did not share the same capabilities to transition to online learning. There are differences in the availability of digital infrastructure, skills and access to these technologies. Furthermore, the university must consider affordability, quality, and financial concerns to remain operational.

As universities attempt to answer these questions and understand their readiness to change, neither the BRICS nor African Higher Education sectors expected radical changes in how learning is conducted. Since the inception of BRIC and thereafter BRICS, online learning has been recognised as a means to promote cultural exchanges and people-to-people interaction. The BRICS Heads of State in 2012 saw technology as a method for the BRICS Network University or BRICS University to overcome the distance barrier preventing in-person contact (BRICS Heads of State, 2012: 48). However, post the 2012 summit, the BRICS failed to encourage online learning technologies or modalities. Similarly, neither did the Association of African Universities or the African Union. The policy focuses on digital transformation within Africa, recognising the need to strengthen the continent's digital infrastructure to promote inclusive economic growth and create jobs while overcoming the digital divide (African Union, 2020, p. 2).

In 2020, at the height of pandemic-related uncertainty, the Association of African Universities called for urgent transition online, recognising that online learning was the only mechanism to continue the learning programme safely, but made this recommendation to institutions where the digital infrastructure supported the change (Dell & Sawahel, 2020). This appeal highlighted the challenges faced by institutions lacking suitable infrastructure. That same year, the BRICS committed to sharing best practices for applying technologies in education (BRICS Heads of State, 2020: 76).

However, in 2021, the BRICS affirmed the need to integrate technologies in the education process, recognising the influence of the pandemic in changing the traditional learning model. The heads of state further encouraged promoting affordable access to telecommunication platforms. The focus on inclusion was to ensure that BRICS countries have alternative learning models available during times of health crisis, such as the COVID-19 pandemic (BRICS Heads of State, 2021: 36). During the pandemic, this alternative model was forced to adopt emergency protocols.

With universities having contended with the pandemic in 2020 and 2021, there is a danger that the emergency remote learning protocols will become long-term

policy. Universities in the BRICS and Africa have had varied success in implementing online learning programmes. However, the proper understanding of online learning is part of the challenge, as many confuse emergency remote teaching with an effective long-term online learning programme (Czerniewicz et al., 2020). This article examines online learning models and identifies the core questions university administrators must answer as they attempt to continue the learning programme during a pandemic. The article further examines the experiences in BRICS and Africa and responds to the BRICS Heads of State 2020 call to share best practices that emerged in these countries.

Research questions

While researching for this paper, three questions had to be explored. Firstly, what key questions must university administrators ask to implement an online learning programme? Secondly, in response to the first question, how have BRICS and a few selected African universities fared in addressing these central questions? Lastly, assuming the university aims to implement an effective long-term online learning programme, how should the current approaches be adapted or improved to achieve this objective, which also requires determining what an effective long-term online learning programme should cover.

Methods

The paper offers a review of literature regarding online learning that explores online learning models intending to formulate the key questions university administrators must ask as they attempt to implement online learning. These questions inform an analysis framework by which BRICS and African countries are assessed. In gathering data that describe the experiences of BRICS and African Universities, a selection of universities from the BRICS countries and also Ethiopia, Ghana and Uganda was made. The study reviews news articles and reports about these institutions and their respective countries from online newspapers and magazines such as University World News. It takes into account public notices posted by each institution on their websites as they transitioned online between 2020 and 2021. The experiences from these universities are individual case studies used to contrast country experiences among the selected countries. In addition, news reports about the online learning experiences from each country using English were selected in South Africa, India, Ghana, and Uganda. Thereafter, a web search was conducted using the Google Translate facility by searching for Portuguese reports from Brazil, Russian reports from Russia, Mandarin from China and Amharic reports in Ethiopia.

In analysing these experiences, the Navigational Capacities Framework, conceptualised by Swartz (2022), was used to assess how students in these varied contexts navigated the transition to online learning. This framework identifies six contextual abilities young people in the Global South need to navigate past their challenges

and thrive in their unique socio-economic contracts. This framework is applied within the online learning context, recognising the inputs and processes needed to develop an inclusive online learning strategy.

Results: Summary of Online Learning Experiences in BRICS and Africa

Brazil

In Brazil, the country traditionally offered free tertiary education up to postgraduate levels. However, under the Bolsanaro administration, the government reduced higher education sector funding and offered no national government support for online learning (McKie, 2020b, 2021). During this period, Brazil suffered from a particularly serious spread of the COVID-19 virus. As of December 2021, the country reported 22.1 million cases in a population of 212 million and at least 615 thousand deaths (Worldometers.info, 2021d).

When considering the digital capabilities of Brazilian universities, several universities attempted online learning programmes but had to cancel them after experiencing connectivity challenges. Subsequently, these universities opted for a mix of contact and online learning (McKie, 2020a). From an equity perspective, Brazil, like other emerging countries, suffers from high inequality, reflected in who can or cannot access online learning facilities and afford to remain connected for the duration of the learning programme (MacGregor, 2021; McCowan & Bertolin, 2020). Furthermore, the government physically reopened the universities with little input from university communities (McKie, 2020a). This decision was widely criticised.

There were many concerns related to the quality of online learning as universities generally focussed on producing asynchronous content, as many of the staff lacked the skills or knowledge needed to adequately prepare the learning materials or navigate the online learning platforms (Rodrigues, 2020). At the same time, some institutions have also been recognised as world leaders for offering high-quality programmes (Haidar, 2021).

And, lastly, there was a significant issue in Brazil, with the national government not offering support and driving funding cuts (Universidade Estadual do Rio Grande do Sul, 2020). Many universities appealed for public donations to overcome these deficits, while some universities received donations from the Justice Ministry who had amassed a collection of seized equipment (Radio Universidade, 2020).

Russia

The country's sheer size complicated its transition to online learning. For example, during the transition, universities had to coordinate their activities with several

communication networks (Valeeva & Kalimullin, 2021). Coordinating this effort was a considerable challenge faced by the authorities, given the significant COVID-19 threat that the country faced, contending with 9.53 million cases in a population of 144 million people, together with 272 thousand deaths by December 2021 (WorldoMeters.info, 2021c).

In March 2020, the country switched to an emergency online model, and by October 2020, the policymakers felt the country could shift to a blended model of contact and online lessons (Valeeva & Kalimullin, 2021). From an equity perspective, Russia has not had to address the digital inequality concerns affecting other emerging countries. In the country, access to technology and digital skills is more uniformly accessible, allowing the country's universities to concentrate on quality issues rather than access (Belarusian Radio and Television Broadcasting Center, 2020).

With the shift to online learning, a greater burden was placed on staff to ensure the learning programme that remained on track. For example, the Higher School of Economics recognised this burden and endeavoured to support staff by hiring teams of teaching assistants that helped coordinate the online learning programme and promote staff-to-student interaction, intending to improve lesson quality (National Research University Higher School of Economics, 2020, 2021).

Quality is also assessed in Russia based on the accumulation of credits and not on the degree of knowledge transfer, which is difficult to measure (Efremova et al., 2018). With Russian universities remaining active during the pandemic, several of them have risen through the university rankings (O'Malley, 2021). However, despite their improved rankings, there were disagreements between students and management about the quality of the online learning programme. Some students felt aggrieved that the high fees didn't equate to a higher quality of teaching and called for cuts to their fees (Foht & Golubeva, 2020).

India

Similar to Russia, in India the shift to online learning was affected by the scale of the organisation campaign required. After physically closing the Universities in March 2020, the country tried to shift 39,000 colleges, supporting at least 27.5 million undergraduate students, to online teaching and learning (Dhawan, 2020; Khaitan et al., 2017). These endeavours occurred while the pandemic ravaged the country, with 34.6 million reported cases in a population of 1.38 billion people and 470 thousand deaths reported as of December 2021 (WorldoMeters.info, 2021b).

In its shift online, India experienced substantial access and inequality issues, limiting the initiative's success. For instance, it was noted that for at least 10% of the higher education institutions it was utterly impossible to go online (The Economic Times, 2020). Only the top 100 universities were allowed to provide online learning courses (Khan et al., 2020). However, several of the top 100 universities on this list also failed to transition to online learning. Many experienced severe difficulties in connectivity, cell coverage, and electricity access, which resulted in abandonment

of online programmes (The Economic Times, 2020). After this failure, the government required universities to request authorisation before attempting online learning.

Income inequality was generally mirrored in an unequal distribution of ICT services and infrastructure programmes (Lakshman Naik et al., 2021). From an equity perspective, private institutions fared better than their public counterparts because their students came from families with greater financial means (Lakshman Naik et al., 2021). In addition, the quality of online learning, where it continued, was poor, with low levels of interaction. Furthermore, the interruptions to teaching and learning led to a substantial backlog in completing the curriculum (Niazi, 2021). These changes to the learning programme also placed a high-stress burden on the students. It was found that the suicide rate among Indian students increased by 21% in 2020 over 2019 levels, highlighting the increased pressure experienced by the students (Kumar, 2021).

While these challenges persisted, there was one interesting spinoff in India among staff and management with better technology access. They found that increased connectivity allowed them to collaborate more easily with their peers in other universities, thus helping to break down organisational silos.

China

At the pandemic's onset, China adopted online learning methods early. Following the country's first lockdown, which coincided with the Chinese New Year celebration at the end of January 2020, the government issued a directive for mass training of academic staff in online learning tools (Zhang et al., 2020; Wu, 2020). In addition, the country's EdTech sector was also requested to assist in the delivery of training and help schools and universities that needed to integrate new tools into their suite of online learning tools. By adopting a wide range of tools, staff and students could identify the tool appropriate to the learning environment. With the mass adoption of these tools and training, a university like Beijing Normal offered 3000 online courses (Varghese, 2021).

From an equity perspective, the Chinese government endeavoured to support students in rural areas by mandating businesses to open their spaces to students to assist them in gaining access to a high-speed broadband internet connection. Through the strong coordinating role of the Chinese government, all sectors of society were brought together to see how they could ensure that teaching continues in a meaningful way (UNICEF, 2021). In addition, the country invested in technology, setting up smart classrooms for every lecturer and offering suitable equipment needed for a stable live stream. Staff were also supported through the mass recruitment of learning facilitators who assisted staff during the lessons or in developing learning materials (Zhu & Liu, 2020).

With the rapid transition, universities at first experienced several difficulties. Staff have noted difficulties in receiving notices that fully explained the policy change during the initial stages of the transition, requiring university administrators to develop emergency protocols on the fly while the national government fully defined its policy position (Swartz & Chetty, 2020). However, after a year of online learning, several

reports of students and staff indicated high satisfaction levels with the online learning platforms (She et al., 2021).

Lastly, China's close relationship with the EdTech sector allowed the country to experiment with new learning models, with some adopting AI to assist with complimentary tutoring programmes. Such advances are novel but potentially they can offer solutions to globally reduce education costs and employment opportunities (Varghese, 2021).

South Africa

Contact learning was shut down in South Africa following the country's lockdown. In this period, some South African universities conducted several needs assessments to determine the feasibility of shifting to an online form of learning (Dell, 2020b; Lange, 2020; Pather et al., 2020). The shift was necessitated by a severe outbreak of the COVID-19 virus in the country, which produced 3.03 million cases in a population of 59 million people, resulting in 89 thousand deaths as of December 2021 (Worldometers.info, 2021e).

In the shift to implementing emergency form of online learning, the country experienced substantial access and affordability challenges. Given the costs of internet data bundles, universities individually negotiated deals with mobile network providers to negate students' costs as they engaged with online university resources (Czerniewicz et al., 2020; Tamrat & Teferra, 2020a). At that time, the main concern about these negotiations was that each institution had to negotiate such arrangements individually, which led to students from different universities receiving varying levels of support and inequity among those universities exacerbating (Cleophas, 2020; Dell, 2020a). In negotiating these deals, night-time bundles were secured to accompany daytime bundles, requiring students to take on odd study patterns to maximise data usage (Vermuelen, 2020). Centralised negotiations could have resulted in uniform benefits for all university students (Mashinga, 2020).

The country's extreme levels of inequality are reflected in technology access and affordability across universities. Students from low-income households had struggled to purchase food during the pandemic, let alone data to supplement the negotiated data bundles (Mabolloane, 2021). A Department of Higher Education and Training survey highlights that at least half of all students struggled with communication challenges since the transition online (Department of Higher Education and Training, 2020). With these access challenges, many staff and students rejected the shift to online learning, citing insufficient opportunities to contribute to the decision-making process (Post School Education Alliance for Social Pedagogy, 2020).

In addition, South African universities accommodate a large population of international students who had to make a difficult choice of whether to return home when their dormitories were shut down. The students who chose to stay in the country had to work out how they would cover accommodation and food costs. A key issue that compounded the difficulty of this choice was that the student was likely to have better

access to the internet from South Africa than what one might experience in their home country (Jooste & Hagenmeier, 2020).

Ghana

Ghana has a mix of public and private universities, and there was a partial switch to online learning in April 2020. In negotiating this shift, the country experienced several technology access challenges, requiring many universities to adopt distance learning modalities instead of online learning by distributing physical copies of learning materials. Given the access challenges, despite the risks of in-person tuition, the country decided to resume contact learning as early as June 2020 (BusinessGhana.com, 2020; Ghana Chamber of Telecommunications, 2020). At the start of the pandemic, Ghana was praised for containing the virus. The country benefited from having a history of managing outbreaks like Ebola (Quakyi et al., 2021). However, the scale of the COVID-19 pandemic also started to overwhelm its public health sector, resulting in 131 thousand cases and 1209 reported deaths in a population of 31 million people (WorldoMeters.info, 2021a).

From a feasibility perspective, Ashesi University had some success in setting up an online platform (Ashesi University, 2020). By relying on the country's postal system and the university's network offices, some Ghanaian universities could also distribute hard copies of learning materials in a timely fashion (Univers, 2020). Still, the country generally suffers from poor network coverage and electricity access, making total reliance on online tools impossible (Dome & Armah-Attah, 2020).

The universities also opted to divide the semester into two halves, with the first half dedicated to online learning and the other for contact learning (Ashesi University, 2020), so those without an internet connection had less study time. In addition to the connectivity challenges, universities discouraged synchronous forms of online learning, distributing recordings with no staff-to-student interaction.

Uganda

The Ugandan experience was similar to Ghana's, with considerable technology access and affordability challenges (Agyapong et al., 2020). However, the country did try to persist longer with an online learning programme when carrying out the 2020/21 academic calendar. Online learning resumed in August 2020, but by October 2020, this learning approach was abandoned due to being unable to address the access challenge (Nakayiwa, 2020). Unlike in South Africa, the challenge pertained to the coverage of mobile broadband networks and issues in providing stable electricity. With these challenges, the government did not support the online learning transition and attempted to quell attempts to adopt online learning methods. Makerere University, for example, had developed the Makerere University e-Learning environment before the pandemic and was better positioned to attempt online learning (Makerere University, 2023). Still, the student population lacked access to the portal due to the country's infrastructural challenges.

Ethiopia

Delivering high-speed mobile network coverage across such a large country as Ethiopia has been challenging. With only a single telecommunications company in the country, mobile network coverage in rural areas has been poor (Adame, 2021). Urbanisation has had less effect in Ethiopia, as you might find in other African countries, contributing to challenges in mobile network coverage and electricity access in rural communities (Alemayehu, 2019). In addition to the pandemic, the country contends with parallel humanitarian crises, given the ongoing conflict in the Northern Region. With the stability challenges, Ethiopia has a unique experience as it frequently implemented internet shutdowns, which have particularly affected the capital city of Addis Ababa (Hamilton, 2020).

With these disruptions, maintaining an online learning programme has been difficult. The universities have opted to move the tuition of third-year and postgraduate students online while halting some bachelor programmes (Araya, 2020). Some analysts believed the country was in danger of creating a lost generation while these university shutdowns persisted (Tamrat, 2020). Since the first lockdown, there has been a partial reopening of the universities, but with the multiple crises underway, it has been nearly impossible to secure additional government funding and the education sector becomes more reliant on donor funding (ECW, 2021).

Analysis: Applying the Navigational Capacities Framework

Understanding the Navigational Capacities Framework

Swartz's (2022) Navigational Capacities Framework provides an opportunity for BRICS and African countries to assess the strengths and weaknesses of their transition to online learning in the wake of the COVID-19 crisis. The emergency measures issued across these countries had varied impacts, providing opportunities for countries to learn from their peer's experiences. As institutions work on integrating online learning as a medium for learning in the long term, the framework offers a structure that is tailored for the Global South, promotes equity and inclusivity, and is context-sensitive and responsive to the needs of their student populations. As confirmed by Wolhuter (2023), the pandemic accelerated online learning adoption but intensified a series of challenges pertaining to quality, inclusiveness, and equality. To ensure these concerns are prioritised, the Swartz (2022) framework holistically views the individual's needs (the students) and those of the collective (the university and the higher education sector).

Transitioning from traditional classroom settings to digital platforms necessitates distinct skills and adaptability. Online learners, particularly in a Global South context, must develop strong self-regulation skills, technological literacy, and the ability

to navigate digital content effectively. This is critical as the online environment demands resilience and adaptability, with learners often managing their schedules and adapting to various digital learning tools and platforms (Swartz, 2022).

The framework also underscores the importance of access to resources and networks in the online learning context. This translates to digital access, technological tools, and support networks, including teachers, peers, and institutional resources. The disparity in these resources significantly impacts students' learning experience and outcomes, particularly in African universities where digital infrastructure barriers persist (Cohen et al., 2022; Nyakanini et al., 2020).

To this end, Swartz's (2022) six Navigational Capacities can inform how these universities navigate their transition to online learning.

- **Capacity to Act Individually in Community:** Universities must encourage and support individual initiative within the academic community. This requirement means providing resources and training for students and staff to adapt to online learning environments while maintaining a sense of community and collaboration.
- **Capacity to Aspire Beyond Cultural Horizons:** Universities need to foster an environment that encourages innovation and adaptation beyond traditional learning models. Embracing technology and exploring new pedagogical approaches, such as blended learning and asynchronous content delivery, are essential.
- **Capacity to Acquire a Range of Capitals:** Developing online learning strategies involves technological infrastructure and social and intellectual capital. This includes building networks for knowledge exchange, ensuring equitable access to resources, and understanding the 'rules of the game' in digital education.
- **Capacity to Recognise and Analyse Social Structures:** Universities must be aware of and responsive to the socio-economic realities of their students. Strategies should consider the digital divide, connectivity issues, and economic barriers to ensure that online learning is accessible and equitable.
- **Capacity to Achieve Open Identities:** Online learning strategies should be inclusive, respecting and accommodating diverse backgrounds and needs. This involves creating content and platforms that are culturally sensitive and accessible to all students, including those from marginalised communities.
- **Capacity to Act Collectively:** As collaboration is crucial, universities must establish partnerships for resource sharing, collective negotiations for better access to digital tools, and sharing best practices. Collective action can also involve engaging with government and private sector partners to improve infrastructure and support.

Application in the BRICS and African Contexts

By applying this framework across the contexts from the BRICS and selected African countries, as described earlier, the following assessment emerges in Table 1.

Table 1. Application of the Navigational Capacities Framework on Online Learning Experiences from BRICS and African Countries

Country	Acting Individually	Aspiring Beyond Horizons	Acquiring Capitals	Recognising Structures	Achieving Open Identities	Collective Action
Brazil	Struggles with individual adaptation due to connectivity issues and lack of government support.	Limited innovation in learning models due to funding cuts and high inequality.	Difficulty in acquiring technological and financial resources.	Lack of acknowledgement of digital divide impacts.	Challenges in inclusive and equitable online learning.	Limited national support, reliance on local initiatives and donations.
Russia	Uniform access to technology, facilitating individual adaptation.	Successful transition to blended learning.	Sufficient technological resources and support.	Effective coordination of digital learning across vast geography.	Emphasis on credit accumulation, possibly overlooking diverse learning needs.	Government and universities collaborated effectively, supporting staff with teaching assistants.
India	Significant challenges with access and inequality, affecting individual learning.	Struggles with large-scale organisation and transition to online learning.	Vast disparities in technological and infrastructure resources.	Awareness of digital divide but limited responses to bridge it.	Poor interaction in online learning, not accommodating diverse student needs.	Collective efforts limited due to infrastructural and policy challenges.
China	Early adoption and strong governmental support for individual learning.	Rapid and innovative adoption of various online tools and methods.	Strong investment in technology and support systems.	Effective policy-making and communication for online learning.	High levels of satisfaction indicating inclusivity and accessibility.	Collective efforts in training, supporting students, and experimenting with new learning models.
South Africa	Varied individual experiences due to extreme inequalities.	Individualised solutions with mobile providers, but lacking uniformity.	Challenges with access, affordability, and equitable resource distribution.	Acknowledgement of digital divide but struggles in equitable solutions.	Issues with inclusivity and participation in decision-making.	Disparate efforts by universities, lack of centralised coordination.
Ghana	Partial and challenging transition to online learning.	Reliance on distance learning due to access issues.	Struggles with network coverage and resource distribution.	Awareness of connectivity challenges but limited solutions.	Limited synchronous learning, not catering to diverse student interaction needs.	Collective efforts in material distribution, but overall limited online transition.
Uganda	Attempted online learning with significant challenges.	Abandonment of online learning due to infrastructural issues.	Lack of governmental support and infrastructural resources.	Acknowledgment of challenges but ineffective in addressing them.	Inequities in access, affecting diverse student participation.	Limited collective action, mainly individual university initiatives.
Ethiopia	Difficulties in online learning due to infrastructural and political issues.	Limited online learning, mainly for specific student groups.	Challenges with network coverage, electricity, and funding.	Recognition of the need for better infrastructure amid other crises.	Struggles with maintaining continuous learning, affecting inclusive education.	Dependency on donor funding, limited collective governmental action.

Source: Author's application of Swartz's (2022) Navigational Capacities Framework

Implications of the Navigational Capacities Framework

Integrating the Navigational Capacities framework into the discussion about the transition to online learning during the pandemic, it becomes evident that universities need to develop a more intentional and adaptable approach to online learning. The framework offers a nuanced perspective on enhancing online learning strategies by focusing on individual and collective capacities within educational communities.

This framework underscores the universities' need to harmonise individual autonomy with communal support within online learning environments. The experiences of Russia and China, where uniform technological access and support are available, exemplify an effective nurturing of this capacity. Conversely, nations like Brazil and India, grappling with significant connectivity and resource disparities, exhibit challenges in developing this capacity. Universities in these contexts must augment resources and training, cultivating a collaborative and communal ethos among students and staff. Cleophas (2020) noted that many institutions struggled to provide individual support within the academic community, which is essential for effective learning and engagement during the emergency transition to online learning. This suggests that universities must focus on technological infrastructure and nurturing a sense of individual agency and community support in online environments.

Further, the framework highlights the importance of aspiring beyond cultural horizons. This aspect is illustrated by China's rapid adoption of online learning and Russia's evolution towards blended learning models, showcasing the critical role of innovation and adaptability beyond conventional educational paradigms. Universities are thus encouraged to embrace technological advancements and explore novel pedagogical methods to remain dynamic and responsive to the evolving landscape of education. The rapid shift to emergency online learning demonstrated the need for universities to be innovative and adaptable, moving beyond traditional educational models (Valeeva & Kalimullin, 2021). This involves exploring new pedagogical approaches and integrating technology to enhance learning experiences. To ensure that the universities promote quality online learning, one must ask how the lesson quality will be affected if delivered synchronously or asynchronously (UNESCO & IESALC, 2020; Hrastinski, 2008). Furthermore, where practical engagements are needed, the instructor must determine how to use the current technologies to ensure the student can engage appropriately (Luescher et al, 2021).

A critical aspect of the framework is the capacity to acquire a range of capitals, encompassing technological, social, and intellectual aspects. Digital access and skills disparities were major barriers during the pandemic (Yeap et al., 2016). The transition to online learning brings to the forefront the need for robust technological infrastructure and a rich exchange of social and intellectual capital. Countries such as South Africa and Ethiopia, faced with stark inequalities and infrastructural challenges, demonstrate the complexities of acquiring these capitals. Universities in such environments must prioritise the development of networks for knowledge exchange, equitable resource

access, and a comprehensive understanding of the digital education ecosystem. The university must recognise the disparities among students based on their socio-economic background, access to technology, level of digital skill and ability to afford the learning material or interact on the learning platforms required in the subject (Czerniewicz, 2018a; Alhabeeb & Rowley, 2017; Luescher et al, 2021; Doe et al., 2017). If addressed, they will turn into opportunities to enhance access to education, promoting socio-economic outcomes in underserved Global South communities (Wolhuter, 2023).

Recognising and analysing social structures is essential to the understanding of the socio-economic realities impacting students (Roddy et al., 2017). This is particularly true in contexts like South Africa and India, where socio-economic disparities pose significant challenges to accessible and equitable online learning. Successful strategies in these regions require a nuanced understanding of the digital divide, connectivity issues, and economic obstacles to ensure inclusivity and equity in online education. Universities must be aware of and respond to the digital divide and connectivity issues, ensuring that online learning is accessible and equitable. In navigating this transition, universities must ensure staff and students can contribute to the decision-making process. Their participation and contribution will help secure buy-in and assist in changing behaviours across the institution (Czerniewicz, 2018b).

Additionally, the capacity to achieve open identities is crucial, as seen in countries like Brazil and Ghana, where inequities and access limitations have impacted online learning. Strategies in these regions must be inclusive, respecting and accommodating students' diverse backgrounds and needs. This entails creating culturally sensitive content and accessible platforms for all students, including those from marginalised communities. Creating inclusive and culturally sensitive content and platforms was a challenge during the pandemic, where the shift to remote learning often led to asynchronous learning with limited interaction, affecting the inclusivity and quality of education (Thoburn, 2021). This is confirmed by Wolhuter (2023) who argues that education models must be contextualised to suit the socio-economic needs. In addition, there is a need to recognise the cultural differences between students, which influence their study behaviours. For instance, a student returning to a rural village may have customary responsibilities to complete each day before having time for their study programme. The learning programme may need to consider such requirements (Mpungose, 2020).

Lastly, the framework emphasises the importance of collective action, as evidenced by collaborative efforts in Russia and China. This aspect is vital for the success of online learning strategies, advocating for universities to establish partnerships for resource sharing, negotiate collectively for improved access to digital tools, and share best practices. Engaging with government and private sector partners to enhance infrastructure and support is also crucial, as demonstrated by China. From South Africa, Czerniewicz et al. (2020) discussed the need for collaborative efforts in designing online learning programmes. Such initiatives include partnerships for resource sharing, collective negotiations for access to digital tools, and sharing best practices. As tuition transitioned online, several universities have been

financially affected due to the deregistration of students, reducing the available funds collected by the institution (Schleicher, 2020: 6-8; UNESCO & IESALC, 2020). Several students had to leave dormitory accommodation and return home, further affecting fee collection. With the austerity measures introduced by governments during the pandemic, the changes affected the university's financial sustainability (Witze, 2020). These financial concerns affect the institution's ability to act collectively. In this regard, universities need to engage in collaborative and strategic planning to ensure their financial health and sustainability in the face of the changing educational landscape.

Conclusion

As universities begin to implement long-term online learning programmes, it is crucial that emergency learning protocols do not become official policy. One must recognise the losses incurred through these emergency protocols and clearly understand their difference from an effective long-term online learning programme. During this transition, it is apparent that some countries have fared better in implementing online learning. Some subjects are also better suited to the online form of learning. Subjects that rely on practical engagement and more staff-to-student interaction have suffered. In transitioning online, lessons must be intentionally designed with the online medium in mind.

If one considers the experiences of China and Russia in particular, the online programmes in these countries performed better mainly due to a focus on addressing technology access and digital skills development. Applying the Navigational Capacities Framework in these contexts demonstrates the significance of investing in capacities like acquiring a range of capitals and aspiring beyond cultural horizons, which have been instrumental in their success. Students and staff in these countries have benefited from their experience using such technologies and, therefore, did not find the shift as dramatic as in communities where access was not as prevalent.

Russia and China have also promoted the role of teaching assistants, recognising that staff carried a significant burden in ensuring that the students efficiently progressed through the curriculum. By easing the burden on staff, more attention was paid to creating quality learning materials, and staff were allowed to interact with students more closely, with teaching assistants also closely engaging the students. This strategy facilitated the creation of quality learning materials and fostered closer interactions between staff and students, emphasising the 'Capacity to Act Collectively' by sharing the educational load.

Asynchronous learning was adopted across Africa and often in Brazil and India. With little to no interaction between staff and students, practically no teaching was conducted, and these universities were pushed into adopting a distance learning model. By committing to the distance learning approach in Ghana, the country could physically distribute learning materials among their student population by relying on its

network of staff and remote infrastructure in rural communities. Ghana's approach to distributing physical learning materials, leveraging its network of staff and remote infrastructure, reflects a pragmatic application of the 'Capacity to Recognise and Analyse Social Structures', catering to the specific needs of its student population.

As universities calculate the economic implications of moving online, they face difficult questions with little supporting literature to guide them. Countries will need to make massive investments in digital infrastructure to solve access challenges and successfully adopt an authentic online learning programme. In this light, the 'Capacity to Acquire a Range of Capitals' is essential for resolving access challenges and fostering an authentic online learning environment. It will also be essential to continue knowledge-sharing initiatives through institutions such as the BRICS Network University or BRICS University League among the BRICS Universities. Sharing knowledge will help all institutions learn faster in crucial areas such as lesson design and training strategies and ensure that access to learning is equitably provided. Sharing knowledge and best practices aligns with the 'Capacity to Act Collectively', enabling institutions to learn rapidly in lesson design and training strategies and ensuring equitable access to learning.

At the same time, there is a need to improve the mechanisms that build closer South-South cooperation, particularly between BRICS and African countries, to understand how to take advantage of our combined insights (Tamrat & Teferra, 2020b). Such exchanges align with the 'Capacity to Achieve Open Identities'. This cooperation is necessary to leverage combined insights and experiences to enhance online learning strategies in diverse socio-economic contexts. Our future dependence on online learning remains unclear in this turbulent global economy. Developing a strategy for an effective long-term online learning programme is essential. To this end, sharing knowledge across the Global South is critical.

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