### Chapter 7

# Inequality and Access to Online Education During a Global Crisis:

## The Case of Higher Education in Some Countries in Southern Africa

#### Herbert Ntuli

University of Cape Town, South Africa

#### Edwin Muchapondwa

https://orcid.org/0000-0002-3400-7548

University of Cape Town, South Africa & Luleå University of Technology, Sweden

#### **Victor Ntuli**

National University of Lesotho, Lesotho

#### Lina Mangwende

University of South Africa, South Africa

#### **ABSTRACT**

The impact of inequality and technology on access to online education has received tremendous attention within the past two decades from researchers across the globe. What remains under-researched is the knowledge of how shocks such as the COVID-19 pandemic affect access to online education. The main objective of the study was to examine inequality in accessing online education in the context of a crisis in a developing region. A mixed-method approach was used to collect and analyze online survey data based on 393 undergraduate students from six countries in Southern Africa. Both observable and hidden inequality sources such as income and participation in household chores compromise the quality of online education. A shift from face-to-face teaching to online education is likely to result in learning difficulties and deterioration in the quality of education. Policies such as the provision of free data improve the learning experience by reducing inequality. Therefore, decision-makers should take into consideration inequality in designing policies and strategies during a crisis.

DOI: 10.4018/978-1-6684-7540-9.ch007

#### 1. INTRODUCTION

The educational inequality gap was intensified in many developing countries across the globe by the COVID-19 pandemic. As a contingency plan to continue with the academic project, most universities in Southern Africa adopted online<sup>1</sup> teaching and learning, which compromised educational quality and/ or standards.

Education is a vital component of any system, be it social, economic, or political, since it provides the necessary knowledge base, through research, and supplies the labour force that is required to sustain it (Olssen and Peters, 2005). If the educational system is disrupted by a shock, such as a disease pandemic, then the system suffers in the short, medium, and long term. The impact of a shock on a system depends on its intensity, spread, and duration (Baldwin and Weder di Mauro, 2020) in addition to its positive and negative feedbacks to the system (Abdel-Sater, 2011). Although the system can adapt to shocks in the long term, it might not be able to respond adequately or cope with the crisis in the short to medium term because of some limitations (Hakovirta and Denuwara, 2020). The limitations are associated with the frequency of occurrence, acquired knowledge, and experience in dealing with different types of systemic shocks (Marivate and Combrink, 2020). The problem with disease pandemics such as COVID-19 is that they do not occur frequently enough for systems to learn and adapt.

The COVID-19 pandemic forced universities across the globe to shut down operations and to adopt online education as a method of instruction, particularly for undergraduate studies that were traditionally taught face to face. Notably, undergraduate freshmen at most universities in Southern Africa did not complete their first face-to-face semester. This seriousness of this situation was compounded by the fact that some of these students had just started learning how to operate devices such as laptops. The sudden change of the mode of delivery for their courses has a differential impact on students in developing countries (Damoense, 2003) in particular because a significant proportion of the students do not have appropriate tools, such as computers, nor access to the internet.

Although most students might have had access to mobile-based internet, reliance on cell phone connectivity for downloading educational material, reading and writing, and uploading assignments is inadequate (Azzi-Huck and Shmis, 2020). Furthermore, the high cost of accessing educational material on the internet was a major constraining factor for students who come from low-income families (Bester and Brand, 2013). In this case, inequality in terms of access to education was exacerbated by technology.

Some Southern African universities tried to close the inequality gap by providing qualifying students with laptops and data, but this did not completely solve the problem for rural students, who still found it difficult to access the internet. Some data packages were only available at inconvenient times e.g. Night Express Data. In many cases, the data provided by universities expired without being fully utilised.

Perceptions, attitudes, behavioural and cultural factors also came into play as a result of this sudden change in the teaching and learning environment. Students coming from disadvantaged communities found it challenging to learn without supervision; for instance, they were used to seeing an instructor in front of the classroom. The supervised tutorial system was also disrupted as student tutors also had their fair share of workload and connectivity challenges. Students who depended on each other to internalize difficult concepts jointly were logistically kept apart. Not only were students affected, but teachers also struggled to adapt and organize their teaching material for online delivery.<sup>2</sup> The teaching of some courses is compromised through online education as instructors find it difficult to express themselves or explain difficult concepts without using body language to complement verbal expressions (Dzansi and

20 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/inequality-and-access-to-online-educationduring-a-global-crisis/312722

#### Related Content

#### Thinking like a School Technology Leader

Jeremy Dickerson, Howard V. Colemanand Gregory Geer (2012). *Technology and Its Impact on Educational Leadership: Innovation and Change (pp. 53-63).* 

www.irma-international.org/chapter/thinking-like-school-technology-leader/62910

#### A System for Automatic Evaluation of C Programs: Features and Interfaces

Amit Kumar Mandal, Chittaranjan Mandaland Chris Reade (2007). *International Journal of Web-Based Learning and Teaching Technologies (pp. 24-39).* 

www.irma-international.org/article/system-automatic-evaluation-programs/2992

#### Instructional Scaffolding: The Computerized Classroom

Merrilee Cunninghamand Ruth Robbins (2012). *International Journal of Web-Based Learning and Teaching Technologies (pp. 20-36).* 

www.irma-international.org/article/instructional-scaffolding-computerized-classroom/78536

#### Supporting Argumentative Collaboration in Communities of Practice: The CoPe\_it! Approach

Nikos Karacapilidisand Manolis Tzagarakis (2009). Solutions and Innovations in Web-Based Technologies for Augmented Learning: Improved Platforms, Tools, and Applications (pp. 245-257).

www.irma-international.org/chapter/supporting-argumentative-collaboration-communities-practice/29652

#### EFTWeb: A Model for the Enhanced Use of Educational Materials

Luís Borges Gouveiaand Joaquim Borges Gouveia (2003). Virtual Education: Cases in Learning & Teaching Technologies (pp. 75-90).

www.irma-international.org/chapter/eftweb-model-enhanced-use-educational/30836