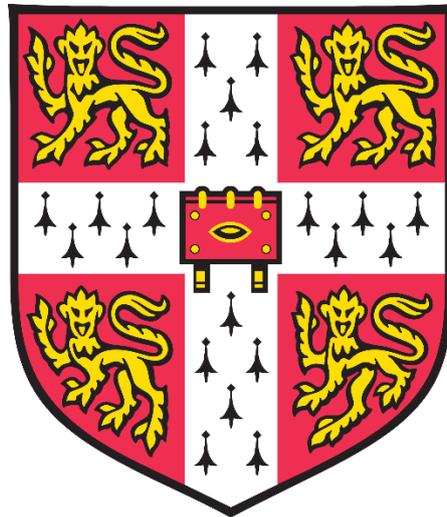


**Addressing Injustices through MOOCs:
A study among peri-urban, marginalised,
South African youth**

Taskeen Adam



King's College

Centre of Development Studies

University of Cambridge

This thesis is submitted for the degree of *Doctor of Philosophy*

February 2020

Declaration

This thesis is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the Preface and specified in the text.

It is not substantially the same as any that I have submitted, or, is being concurrently submitted for a degree or diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text. I further state that no substantial part of my dissertation has already been submitted, or, is being concurrently submitted for any such degree, diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text.

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Date: 24 February 2020

Taskeen Adam

Cambridge

Abstract

Addressing Injustices through MOOCs: A study among peri-urban, marginalised, South Africa youth.

Taskeen Adam

The legacies of colonial rule continue to impact everyday life, particularly in education. These structural inequalities are often reinforced and amplified in online ‘global’ education through a form of digital neocolonialism, which is where hegemonic powers indirectly control or influence marginalised groups through the internet or information technology. In striving for justice-oriented online education models, this study analyses to what extent Massive Open Online Courses (MOOCs), produced both internationally and locally, support (or could support) the needs, preferences, and aspirations of marginalised South African youth and address the material, cultural-epistemic, political, and geopolitical injustices they face.

To evaluate what South African peri-urban youth desire in their education and futures, as well as the challenges they experience, a seven-part survey was conducted with 250 youth from five townships in South Africa. Responses showed that whilst participants strongly value and aspire to further their education, financial difficulties, infrastructural barriers, family problems, and lack of emotional support and life mentorship limit them from achieving this. Participants reflected on how colonial and apartheid legacies have affected their educational experiences and identities through inferior quality of education, forced languages, forgotten histories and incongruent values, cultural norms and practices.

In parallel, semi-structured interviews were conducted with 35 MOOC designers, from South Africa and the USA, to investigate the ways in which efforts, if any, were being made to reach students most in need of quality education. Interviews covered themes of openness, accessibility, and justice. It was found that, depending on the MOOC designer’s understanding of social justice and decolonial thought, they placed varying emphasis on addressing different forms of injustice. Some focused on resource, access and infrastructural barriers, while others focused on issues of content relevance and knowledge production. Furthermore, MOOC designers’ attempts to address injustices strongly related to their own identities and lived experiences, highlighting the importance of plurality of thought and epistemic diversity in the producers of MOOCs.

Drawing on the historical injustices and lived experiences of the youth, and the attempts to address injustices by the MOOC designers, it was ascertained that there is no one-size-fits-all formula to creating equitable MOOCs. Rather, depending on the purpose and target audience of the MOOC, nuanced approaches to addressing injustices are suggested. These approaches are shaped by various leverage points that influence the types of, and the extent to which, participatory methods, accessibility measures, knowledge sources, assessment and critical pedagogy are implemented. Additionally, the importance of these leverage points varies over the MOOC’s lifecycle, from inception and design, to implementation and assessment. Bearing in mind the broad-ranging injustices that youth participants raised, these approaches are presented with great caution that educational technologies and open education are not panaceas but if designed and used appropriately and justly, can be tools for liberation.

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Acronyms and Abbreviations

ANC: African National Congress

ADDIE: Analyse, Design, Develop Implement, Evaluation

BCM: Black Consciousness Movement

BEE: Black Economic Empowerment

BBBEE: Broad-Based Black Economic Empowerment

BME: Black and Minority Ethnic

CA: Capability approach

cMOOC: connectivist Massive Open Online Courses

CPT+10: Cape Town Open Education Declaration 10th Anniversary

CTC: Computer Technology Centre

DEIC: Dutch East India Company

DoHI: Dimensions of Human Injustice

DStv: Digital Satellite Television

EPFL: École Polytechnique Fédérale de Lausanne

GUI: Graphical User Interface

HBU: Historically-black University

HDI: Human Development Index

HWU: Historically-white University

ICT: Information and Communication Technologies

LMIC: Low- and Middle-Income Country

MIT: Massachusetts Institute of Technology

MOOC: Massive Open Online Courses

NP: National Party

NQF: National Qualification Framework

OBE: Outcome-Based Education

ODEL: Open Distance e-Learning

ODL: Open Distance Learning

OEM: Open Education Movement

OEP: Open Educational Practices

OER: Open Educational Resources

PAC: Pan-African Congress

PMP: Potential MOOC Participants

RMF: Rhodes Must Fall

ROER4D: Research on Open Educational Resources for Development

RSQ: Research sub-question

SA: South Africa

SABC: South African Broadcasting Corporation

SACHED: South African Committee for Higher Education

SASO: South African Students' Organisation

TEL: Technology-Enhanced Learning

UJ: University of Johannesburg

UNISA: University of South Africa

UCT: University of Cape Town

UN: United Nations

UNESCO: United Nations Educational, Scientific and Cultural Organization

WiFi: Wireless fidelity

Wits: University of the Witwatersrand

xMOOC: Extended Massive Open Online Courses

1 Introduction

1.1 MOOCs in South Africa

With increasing connectivity throughout the developing world, and ‘global’ online education such as Massive Open Online Courses (MOOCs) becoming more established, there has been great optimism for the reduction of global educational inequalities, particularly through the ‘disruption’ of traditional content delivery methods and democratisation of access to quality higher education (Macharia 2014; Moura et al. 2017; Rambe and Moeti 2017). MOOCs offer flexible learning and free or low-cost access to course content from the world’s top universities, to anyone with an internet connection. However, the philanthropic and egalitarian claims of MOOC platforms are challenged by counter claims of ‘academic elitism’ and ‘intellectual neo-imperialism’ through the dominance of MOOC provisions by elite Western universities and consortia and the resultant unidirectional core-to-periphery export of knowledge from these universities to the rest of the world (Czerniewicz et al. 2014; Rambe and Moeti 2017:633). Furthermore, egalitarian claims are undermined by studies such as Patru and Balaji’s (2016:39) which analysed 76 edX MOOCs run in 2013 and 2014 and found that 71% of participants had a bachelor’s degree or higher, 69% were male and 69% originated from developed countries.¹

This research is situated in the South African context, where colonialism and apartheid, followed by insufficient attempts at reform, has led South Africa to be one of the most unequal countries in the world, with a Gini coefficient of 0.6 (World Bank 2019). Educational inequalities have been exacerbated by neoliberal policies in education such that ‘the post-2000 higher education system has perhaps become even more elitist than it was prior to 1994, with social class now acting as a major “stalling” force on the revolution in African enrolments.’ (Cooper 2015:248). Furthermore, university spaces remain culturally alienating for black students and centres Eurocentric curriculum and pedagogy (Chikane 2018a; Nyamnjoh 2016; RMF 2015). Such educational inequalities reached a tipping point in 2015 and 2016 where university students broke out in protest for free, decolonised education under the banners of #RhodesMustFall and #FeesMustFall (ibid.).

In light of these stark educational inequalities, three of South Africa’s top (and historically-white) universities have also joined the global online education movement with

¹ Research by Reich and Ruipérez-Valiente (2019), discussed in Section 2.4.3, shows that such inequalities still persist into 2017-2018.

MOOCs on the Coursera,² FutureLearn³ and edX⁴ platforms. These are among the first MOOCs that are independently produced from the African continent and are among the first to contribute to the MOOC space from African contexts and perspectives. This presents a unique opportunity to ascertain whether, and in what ways, the contexts and locations of MOOC production and MOOC designers influence the ethos and design of MOOCs. This research focuses on MOOC production from South Africa and the potential for these MOOCs to truly democratise educational opportunities for marginalised groups in South Africa.⁵

1.2 Research Framing

This research is situated at the intersection of two themes: the injustices faced by marginalised youth in South Africa, and the potential of MOOCs to support the educational needs of marginalised groups. To investigate these themes, a transdisciplinary and pragmatic approach is taken in that I draw on a range of disciplines and bodies of knowledge needed to analyse and better understand the topic. Bodies of knowledge from the fields of education, philosophy, politics and international relations, development studies, and engineering and technology studies were drawn upon throughout this study.

The first pool of literature that frames this research are the critiques of the Open Educational Movement (OEM). Three lenses of critique are relevant here. The first is the neoliberal critique which problematises ‘openwashing’; the use of open terminology, without its underlying tenets of free access and open licensing, for branding, marketing and commercial interests, such as in the case of MOOC platforms (Weller 2014; Wiley 2011b). The second is the social injustice critique which problematises the idea of ‘openness’ as good in and of itself, and asserts rather that open educational programmes need to make a concerted effort to centre issues of social (in)justice if they are to address educational inequalities (Bali et al. 2018; Hodgkinson-Williams and Trotter 2018; Lambert 2018; Watters 2014). The third is the neocolonial critique which builds upon the social injustice critique to further emphasise the cultural-epistemic and geopolitical imbalances within the OEM (Adam 2019; Lockley 2018; Piron et al. 2017).⁶

² Coursera can be reviewed at <https://www.coursera.org/>.

³ FutureLearn can be reviewed at <https://www.futurelearn.com/>.

⁴ edX can be reviewed at <https://www.edx.org/>.

⁵ ‘Educational opportunities’ is intentionally used as a more holistic term instead of ‘access to education’ which only refers to one dimension of educational needs.

⁶ Portions of text from my journal article, Adam (2019), is re-used throughout this thesis. This is in accordance with the University of Cambridge’s guidelines for usage of one’s journal articles in one’s thesis.

To properly interrogate these critiques, conceptions of justice need to be clarified as justice has a multiplicity of meanings. As this research attempts to address injustices perpetuated in MOOCs, and investigate the use of MOOCs as tools for liberation, an analytical framework is first needed to distinguish what injustices are present in MOOCs and what injustices can be addressed through MOOCs. This research draws upon multi-dimensional social justice frameworks which highlight redistributive, recognitive and representational injustices (Fraser 2005; Hodgkinson-Williams and Trotter 2018; Lambert 2018), as well as decolonial thought which highlights coloniality of being, coloniality of knowledge and coloniality of power (Maldonado-Torres 2007; Mignolo 2007; Ndlovu-Gatsheni 2015), to develop the Dimension of Human Injustice Framework which highlights three distinct yet overlapping and reinforcing injustices, namely; material, cultural-epistemic, and political/geopolitical injustices. This synthesis of theories of justice from the Global North and Global South in itself serves as a contribution to knowledge.

In addition to social justice and decolonial discourses, embodied cognition and the capability approach provide key theoretical underpinnings for this research. Embodied cognition theory describes that knowledge is formed by interpretation through our sensorimotor capacities, which are rooted in our biological embodiment and shaped our cultural history (Varela, Rosch, and Thompson 1992). The capability approach highlights that individuals and communities decide for themselves what they have reason to value and regard as a good-quality life, as opposed to a universal set of principles dictating what they ought to value (Sen 1999).

1.3 Research Aims and Questions

Building on literature that argues for an explicit focus on justice in open educational programmes, the main aim of this research is to establish factors, decisions and practices that contribute to designing justice-oriented MOOCs. With this in mind, this thesis responds to the following **overarching research question**:

To what extent do or could Massive Open Online Courses (MOOCs), particularly those produced in South Africa, support the educational needs, preferences, and aspirations of marginalised, peri-urban South African youth and address the material, cultural-epistemic, political, and geopolitical injustices they face?

This research question is broken down into four sub-questions, the former two focusing on the marginalised, peri-urban South African youth and the latter two focusing on MOOC designers. As a grounded theory approach was taken, this meant that important themes and research

questions emerged *from* the data, as data collection and analysis happened iteratively. The grounded theory approach was used differently between the two research participants groups – the marginalised peri-urban youth and the MOOC designers – as different approaches were needed to reach different objectives. For the marginalised, peri-urban youth, the capability approach and grounded theory approach strongly shaped the research sub-questions which sought to understand from the marginalised, peri-urban South African youth themselves what they have reason to value.

As the overarching research questions aims to determine whether MOOCs can support the educational needs, preferences, and aspirations of marginalised peri-urban South African, the first research sub-question (RSQ) sought to first establish these needs, preferences and aspirations:

Research sub-question 1: *What are the needs, preferences, and aspirations of the marginalised, peri-urban youth in South Africa, specifically regarding education and technology?*

Similarly, before discussing whether MOOCs can address the injustices that marginalised youth face, the second research question sought to first establish what injustices the marginalised, peri-urban South African youth face:

Research sub-question 2: *How do historical injustices, particularly colonialism, apartheid, and their legacies, impact the education of marginalised peri-urban youth in South Africa?*

Shifting then to the production side of MOOCs, the latter research sub-questions emerged out of the semi-structured interviews with MOOC designers. It was observed that terms such as openness, social justice, and decolonisation had different meanings to different MOOC designers. As this research was uniquely positioned to investigate the role of context and situatedness of MOOC designers and MOOC production centres, the third research sub-question sought to map conceptions of openness to MOOC designers' identities through drawing on embodied cognition theory:

Research sub-question 3: *What is the impact of a MOOC designer's embodied, distributed, situated cognition on their understanding and enactment of openness in MOOCs?*

Moving from conceptualisations of openness to conceptualisations of justice, the fourth research sub-question sought to investigate how differing conceptions of (in)justice, analysed through the Human Dimension of Injustice Framework, may result in different ways of addressing injustices:

Research sub-question 4: *What are South African MOOC designers' conceptualisations of justice and how do they attempt to address these injustices in and through their MOOCs?*

1.4 Contributions to Literature and Practice

As Bali (2014:44) highlights, conducting research on MOOCs is difficult due to the 'rapid developments' in the field. There are however gaps and under-researched areas in knowledge, literature and practice which this research contributes to:

- **MOOC production from Africa:** Although there is more literature emerging, there is still very little research on the impact of MOOCs in Africa. Moreover, such literature tends to focus on issues of *access and adaptation* of MOOCs and OER to African contexts with little focus on MOOC *production* from the continent. This study aims to contribute to literature on MOOC production from South Africa.
- **Research on marginalised MOOC non-users:** Much of the research on MOOCs use the data of *existing* MOOC participants to highlight the imbalanced composition of the participant pools (i.e. predominantly white, male, well-educated, wealthy and from the Global North).⁷ However, the literature often stops at problem identification. This research builds upon these findings and has taken the difficult task of conducting research with MOOC *non-users* from underrepresented demographics (i.e. marginalised, black youth from under-resourced areas in South Africa) to understand why they have chosen not to, or are inhibited from, taking MOOCs.
- **Qualitative research on MOOC non-users:** Existing research on MOOCs leverage of the unprecedented access to large sets of student data to *quantitatively* analyse learning patterns which has thus resulted in hundreds of quantitative studies. This research has chosen to take a highly *qualitative* approach, focusing on getting an in-depth understanding of the lives of the marginalised youth, and their educational needs.

⁷ This is expanded on in Section 2.4.3.

- **Centring educational needs over technological panaceas:** Much research within the MOOC space takes a techno-centric approach, centring MOOCs as disruptive technological solution for democratising access to education. This research instead takes a novel starting point of first identifying and centring the educational needs of marginalised groups, investigating *whether* MOOCs can in fact address their needs, *before* evaluating how and to what extent.
- **Centring MOOC designers and epistemic diversity:** While most critical research on MOOCs highlight the content-centred and pedagogical shortfalls *within* MOOC design,⁸ this research focuses on environmental and contextual factors *surrounding* MOOC production as well as the epistemological framing of MOOCs. Drawing on the few studies that highlight how MOOC designer identities are integral to the development of the ethos of the MOOC (Ross et al. 2014), this study emphasises the critical role of MOOC designers' backgrounds and motivations in the design of MOOCs, and argues for epistemically diverse MOOC designers if we aim to produce justice-oriented MOOCs.
- **Designing justice-oriented MOOCs:** While there is increasing discussion of designing for justice within the *OEM*,⁹ this study is among the first to contribute to the design of justice-oriented *MOOCs*. This serves as the main contribution of this research. In addition to contributing to knowledge, it serves as a practical guide to MOOC designers endeavouring to design justice-oriented MOOCs.

Beyond the MOOC space, is the contribution of the **Dimensions of Human Injustice Framework**, which draws and various theories of (in)justice originating from the Global North and Global South to create a holistic framework that highlights material, cultural-epistemic and political/geopolitical injustices. The applications of this analytical framework can be applied broadly to any analysis of injustice, within the educational space and beyond.

While these aforementioned contributions are key, the main motivation for this research project was to challenge the dominance of knowledge production from the Global North and show the valuable contribution that epistemologies and practices from the Global South can have on the global knowledge base, particularly in the space of global online education which tends to be framed by Western epistemologies, values, norms and languages.

⁸ This is illustrated in Section 2.4.6.

⁹ For example, Lambert (2018) and Hodgkinson-Williams and Trotter (2018) discuss social justice in relation to open education.

1.5 Important Definitions

For the remainder of the thesis, the marginalised, peri-urban¹⁰ South African youth of this study are termed ‘Potential MOOC Participants’ (PMPs) to ease the flow of writing. I also make use of ‘MOOC designer’ as a loose umbrella term for ‘MOOC instructors’ and ‘MOOC support team’ involved in the process of designing a MOOC. ‘MOOC instructor’ is used for educators or academics that appear in the visual content and who are subject experts in the topic of the MOOC.¹¹ ‘MOOC support team’ are those who support the MOOC design process through guiding instructors in content creation, advising on digital pedagogies, managing the MOOC production, and providing technical support. Depending on the size of the MOOC team or centre, the roles and responsibilities vary and overlap.

Technology, often used in this thesis, is defined here as the practical implementation of scientific knowledge. Information Technology (IT) is defined here to mean the use of any computers, storage, networking and other physical devices, infrastructure and processes to create, process, store, secure, and exchange all forms of electronic data (Rouse 2019).

As geopolitical inequalities are frequently mentioned in this thesis, terms are used to differentiate between groups of countries with differing levels of power and wealth. The terms ‘Global North’ and ‘Global South’ are used as a less hierarchical, non-evolutionary, counter-hegemonic way of referring to geopolitical imbalances as a result of colonialism and neocolonialism (Hollington et al. 2015; Santos 2014), however ‘Western’, ‘developed’ and ‘developing’ are also used where it is more appropriate e.g. it is common parlance in literature to say ‘Western epistemologies’ rather than ‘Global North epistemologies’. While these terminologies are all problematic as they homogenise diverse groups of countries together, to do away with them eradicates the history of colonialism and hides the neocolonial relations with former colonies.

1.6 Chapter Summaries

Chapter 2 begins by outlining the history of education in South Africa, from colonialism to apartheid to political emancipation. The 2015 student protests for free, decolonised education

¹⁰ Peri-urban regions are densely-populated regions on the outskirts of major cities and usually house the cheap, unskilled and semi-skilled working force that cities depend on.

¹¹ Connectivist MOOCs (cMOOCs), use the term MOOC ‘facilitator’, however, no cMOOCs were reviewed in this study. FutureLearn uses the term ‘educator’, however, for ease, ‘MOOC instructor’ is used for all three platforms reviewed.

is highlighted as a key turning point in South African higher education. The second part of the chapter discusses the history, evolution, trends and debates in the OEM and MOOC space.

Chapter 3 outlines the conceptual framework of the research. It first draws upon embodied cognition theories and the capability approach to set the theoretical underpinnings of this research. Thereafter, I delve into theories of social justice and decolonial discourses, eventually bringing them together to form the Dimensions of Human Injustice Framework.

Chapter 4 sets out the methodological approach of the research. Social constructionism as an epistemology is explained as well as its compatibility with a realist ontology. Rationales for a grounded theory methodology and mixed methods approach are given. The regional beta online course is explained along with the surveys and semi-structured interviews as data collection methods.

Figure 1-1 diagrammatically depicts the flow of data chapters 5, 6, 7, 8, and 9.

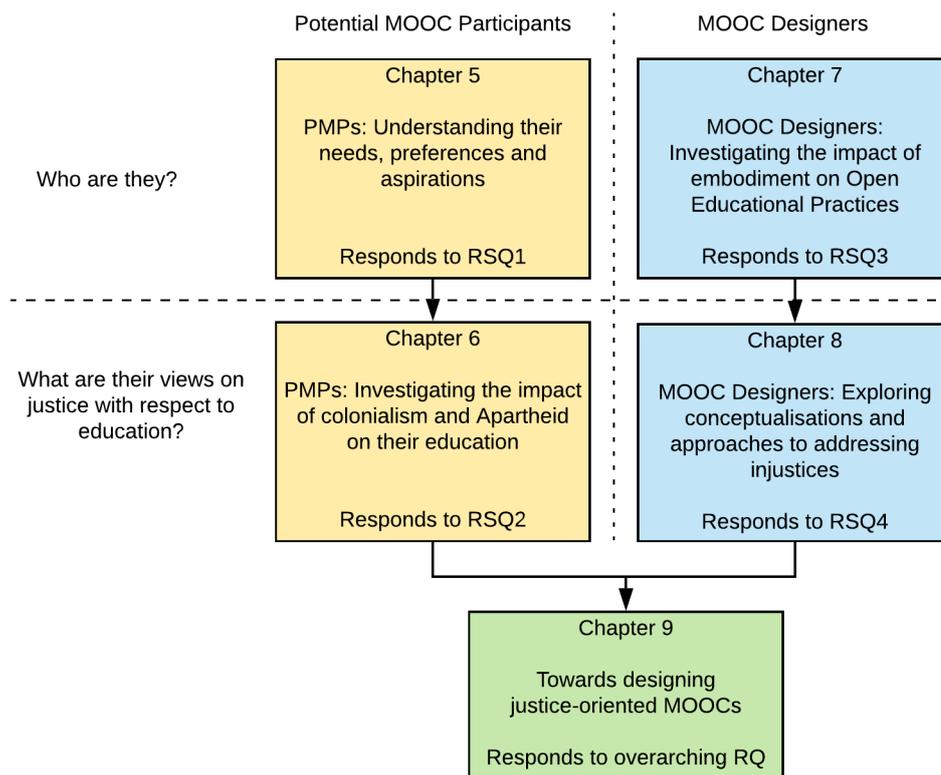


Figure 1-1 Flow of chapters

Source: Author's own

Chapter 5 draws on the capability approach to understand the lives of the PMPs, particularly regarding education and technology. Findings from the Wellbeing Survey highlight their difficulties in life and what they deem a good-quality life. The Education and Employment

Survey findings highlight their educational aspirations, shortfalls and learning preferences. The Technology Survey findings ascertain their access, usage and perceptions of technological devices. Finally, the Feedback Survey presents findings from the survey conducted *after* having done the beta online course. It highlights their experiences, suggested improvements and preferences on interaction in learning.

Chapter 6 places more emphasis on historical and present-day injustices through investigating the impact of colonialism, apartheid and their legacies on the educational experiences of the PMPs. Material inequalities in the quality of schooling in historically-white and historically-black areas are highlighted. PMPs share experiences of racial discrimination, highlight the dominance of Western ways-of-being, unpack the complexity of language choices, and elaborate on the lack of accommodation of their cultures in their education. Opinions on the significance of the educators' race is unpacked as well as their perspectives on decolonisation of education.

Chapter 7 turns attention to the MOOC designers. Drawing on embodied cognition theory, the first half of the chapter investigates the impact of MOOC designers' identities on their understanding and enactment of openness. Four non-exhaustive categories that emerged from the data, namely their personal background, academic background, life experiences and political inclinations, were drawn to outline the strong influence that their identities have on the epistemological framing of their MOOCs. The second half of the chapter compares MOOC designer interviews conducted in South Africa, with those conducted in Cambridge, Massachusetts, to highlight key differences in the ethos and framing of MOOC design between the two regions.

Chapter 8 contextualises itself in the wake of decolonial student movements in South Africa that have caused faculty, in this case MOOC designers, to reflect on the injustices in the higher education system. The chapter unpacks MOOC designers' conceptualisations of justices, shaped by their opinions on social justice and decolonial discourses circulating. Applying on the Dimensions of Human Injustice framework, MOOC designers' conceptualisations and attempts to address injustices in and through their MOOCs are dissected in terms of their emphasis on material, cultural-epistemic and political/geopolitical injustices. Various contesting approaches to addressing injustices in MOOCs are highlighted.

Chapter 9 pulls together findings from the previous chapters to outline approaches to designing justice-oriented MOOCs. Its aim is to highlight factors, decisions and practices that

contribute to designing justice-oriented MOOCs. Four decision-making spheres in MOOC design are outlined: the framing of the MOOC; the conceptualisation of the MOOC by the design team; the situating of the MOOC in its societal, political and environmental contexts; and lastly, constructing and implementing the MOOC. The chapter argues that there is no one-size-fits-all framework for designing justice-oriented MOOCs; the path taken depends on the purpose and target group of the MOOC and is guided by the MOOC's and MOOC designers' philosophical underpinnings. A key difference between designing justice-oriented MOOCs and designing justice-oriented MOOCs *for marginalised groups* is highlighted.

2 Historical Context and Literature Review

2.1 Introduction

This research brings together two themes, the injustices faced by marginalised youth in South Africa and the potential of MOOCs to support marginalised groups. Two literature reviews are thus necessary. Section 2.2 outlines the historical context of South Africa, from colonialism to apartheid to political emancipation. Throughout this historical overview, I outline how education was used for different agendas from conditioning the suppressed into obediently abide, to creating a workforce for the mining industry.

Sections 2.3 and 2.4 shifts focus to recent debates in open and online education. The digital divide is reviewed, before unpacking the histories of the Open Education Movement (OEM) and MOOCs, from their original visions and purposes to their current instantiations. They are also reviewed in terms of their ability to respond to educational issues in the Global South, particularly Sub-Saharan Africa. Current trends, debates and recommendations are highlighted regarding MOOC design. Finally, in Section 2.5, the OEM and MOOCs are critiqued through three lenses, namely, the neoliberal, social injustice and neocolonial critiques.

2.2 Historical Context

2.2.1 Colonisation of Southern Africa

Centuries ago, societies in the southern tip of Africa were largely agrarian and nomadic; the oldest indigenous inhabitants being the Khoisan¹², with later settlements by agriculturalist Bantu tribes (Ross 2008).¹³ In these precolonial societies, education was lifelong and embedded into daily life (Christie 1985). Learning was largely experiential, and elders passed on history and tradition through songs, poems, and stories (Christie 1985).

In 1652, the Dutch East India Company (DEIC) arrived, led by Jan van Reibeeck, to set up a trading post which transformed into a colony (Ross 2008:23).¹⁴ The following century saw a formalised ‘genocidal practice’ to ‘extirpate’ the Khoisan (ibid.). Those who survived became labourers on the farms of settler-colonisers. Alongside Khoisan labourers, approximately 60,000 slaves were brought to the Cape from Indonesia, India, Madagascar and East Africa between 1652 and 1807¹⁵ (Ross 2008). Between 1795 - 1803, the British conquered the Cape.

¹² The Khoi were hunter-gatherers and the San were pastoralists.

¹³ There are three authors referenced in this research with the surname ‘Ross’. Ross (2008) refers to Robert Ross.

¹⁴ The first European encounter was with Portuguese explorer Bartolomeu Dias in 1488.

¹⁵ This date marked the abolition of the overseas slave trade.

By the 1830s, slaves were released as the British argued that by preventing them from taking their labour freely to market, ‘the arrangements sinned against the newly developed economic precepts and were therefore unjust’ (Ross 2008:40).¹⁶ Slavery and forced labour were replaced by capitalist wage-labour principles where labourers had a ‘choice’ to partake in a system that was designed to flourish based on their marginalisation.

As British influence grew, they frequently clashed with African tribes¹⁷ and won by reducing tribes to poverty, ‘burning their fields and huts and driving off their cattle.’ (Ross 2008:41).¹⁸ On what remained, they would install magistrates to control the chiefs and thereby bring ‘civilisation’ (ibid.). African tribes were gradually forced into waged labour and were formally brought under colonial rule by 1857 (ibid.). Over the next century, the native chiefs became the bottom rank of the colonial hierarchy and through ‘indirect rule’, the colonists asserted their power (Mamdani 1996:2).¹⁹

While the DEIC had not paid much attention to education,²⁰ British settlers used education to assert their language, traditions and values.²¹ This was done through establishing a formal schooling system, making English the official language, and anglicising churches (Christie 1985).²² Quality of education developed along social and racial lines: richer whites attended private schools focusing on social advancement (Jansen 1990:197),²³ Khoisan and ex-slaves²⁴ mainly received education that would create a ‘docile and obedient workforce’ (Christie 1985;

¹⁶ Ross (2008:40) outlines that on ‘1 December 1834 all slaves in the Cape were liberated, although the ex-slaves still had to endure four years of bondage as so-called apprentices before they could enjoy their freedom.’ In reality, a large number of ex-slaves continued to work as labourers, with conditions for labour determined by the Master and Servant Ordinance which was written in gross favour of the employers (ibid.).

¹⁷ These clashes were mainly with the amaXhosa in the ‘Frontier Wars’.

¹⁸ Prior to these clashes between the British and the African tribes, inter-tribal wars had been occurring in a quest for land and power. These were somewhat fuelled by the Europeans who were in close proximity and who had brought in a variety of resources (Ross 2008:37). The wars on the east coast culminated with the Zulu kingdom under Shaka. There had also been conflict between the Griquas (a new mix-race group formed from the Dutch having sexual relations with Khoisan women) and the African tribes (Ross 2008).

¹⁹ The tribe chiefs were given a salary in exchange for running the local territory. In order to preserve the chiefs respect in his community, all orders went through him as direct intervention would devalue the chief’s authority. In this process, traditional practices began to be used quite differently than in the pre-colonial era. One distinction was that chiefs originally would have a committee to help in decision-making, but with the colonial influence, more individual power was gradually taken. (Mamdani 1996:2)

²⁰ Teaching largely took place in churches and was mostly reading of the Bible.

²¹ Going to school, being Christian, and dressing in European-style clothing made one respectable and civilised in society (Ross 2008).

²² In 1829, the South African College was formed, which later, in 1918, became the University of Cape Town (UCT) (Phillips 2003).

²³Subsidies were introduced in 1893 for poorer white communities (Christie 1985:34). There was also a town and country divide where white Boer (Dutch-settler) children received less formal education, mainly through the church (ibid.).

²⁴ The ex-slaves, along with indentured labourers, would become known as ‘coloureds’ in the next century.

Platzky Miller 2019:72),²⁵ and African tribes mainly received education from missionary schools that aimed to spread ‘a Western way of life among the “heathen” Africans and to teach them work values’ (Christie 1985:36; Jansen 1990).²⁶

With the discovery of diamonds and gold in the 1860’s²⁷ and the development of a mining industry to exploit this, there were massive economic, political and social changes (Christie 1985; Ross 2008). Three new social classes were formed: a small group of wealthy mining capitalists, well-paid skilled workers, and a large group of unskilled workers for manual labour (Christie 1985). This shift to a mining economy necessitated an industrial workforce and Africans were thus taught the Industrial Training Curriculum (Jansen 1990:198; Platzky Miller 2019). One mining capitalist that benefitted immensely was Cecil John Rhodes, who attempted to monopolise the thriving mining industry (Platzky Miller 2019:74; Rotberg 1988).²⁸

In 1910, the British consolidated four polities into the Union of South Africa.²⁹ From this stemmed legislation³⁰ which put black people in inferior positions relative to white workers, paid them minimal wages, zoned them to reserves, and removed their rights to land ownership beyond these reserves (Christie 1985:46; Platzky Miller 2019:76). Education was necessary to support the growth of the industrialised capitalist system. For whites, the British government introduced free compulsory education. For blacks, education remained of a poorer quality, but with a more industrial skills-based focus. In line with the *Differentiated Education Policy (1922)*, state schools were mandated to teach in ‘vernacular’ languages which inhibited black students from the opportunities and jobs of the English-dominated society (Jansen 1990:199).³¹

²⁵ A big acknowledgement needs to be made to Joshua Platzky Miller whose extensive literature review and bibliography of South African education contributed immensely to the writing of Section 2.2.

²⁶ At the same time, other cultures and language evolutions were taking place. Through bringing in slaves from Indonesia, Islam was also brought to South Africa.

²⁷ Prior to the 1860’s, the main commodities were wine, wool and wheat.

²⁸ Rhodes used his increasing economic power, coupled with his political power as Prime Minister at the time, to take measures like the 1894 Glen Grey Act which sought to ‘enforce racial segregation and pressure Africans to work in white-owned (and *particularly Rhodes-owned*) industries’ (Platzky Miller 2019:74; Rotberg 1988:470–71). Section 2.2.5 discusses how the Rhodes statue at UCT became the symbol of colonial exploitation in the 2015 #RhodesMustFall campaigns for decolonised education.

²⁹ The four polities were the British-controlled Cape and Natal colonies, and the Boer-controlled Orange Free State and Transvaal (Feinstein 2005:34; Ross 2008:42). Preceding the Union of South Africa, the Anglo-Boer wars (1880-1881 and 1899-1902) were fought for control over land and natural resources; the British eventually won. When the constitution for the New Union was being drawn up at National Convention, no black people were represented (Christie 1985:46).

³⁰ This included the *Mines and Works Act (1911)*, the *Natives Land Act (1913)* and various other policies.

³¹ This point of black students being prevented from learning to speak English is particularly relevant to the language-of-instruction debates in Chapters 6.

2.2.2 Apartheid South Africa

As manufacturing industries emerged, more people migrated into increasingly overcrowded cities. Political unrest fomented as African workers rebelled, wanting better jobs, wages and living conditions (Christie 1985:52; Ross 2008:115). In 1948 the Afrikaner nationalist party (NP) won the white-only election and came into power with plans to formally cement racial segregation; apartheid. The *Group Areas Act (1950)* zoned people in urban areas according to race,³² while ‘dompas’ pass laws further restricted black people from moving to and through urban areas.

Over the 1950’s and 1960’s, political organisation and strike action increased (Christie 1985:53). On 21 March 1960, 69 people were killed and 178 injured while protesting against pass laws in the Sharpsville massacre.³³ The African National Congress (ANC) and Pan-African Congress (PAC) were banned and black leaders like Mandela and Sisulu were imprisoned (Christie 1985:53). Resulting from this, the Black Consciousness Movement (BCM) formed from the South African Students’ Organisation (SASO), filling the political vacuum (Magaziner 2010; Mangcu 2012). Steve Biko’s works, which drew on Du Bois, Cesaire, Fanon, Senghor and other anti-colonial thinkers, contributed immensely to the ideological framing of the movement (ibid.). Its main aim was to tackle the psychological dimensions of oppression in the minds of black people and instil in them the courage to fight against an unjust system (ibid.).

Over the 1970s-80s, increased labour agitation and a stagnating economy forced the state to offer small reforms (Christie 1985:54).³⁴ Numerous political groups formed at this time, from student organisations to trade unions, many of which, the apartheid government banned. One pivotal moment in South African history occurred in this period when the apartheid government decreed Afrikaans to be the medium of instruction in schools. As Afrikaans was associated with the oppressions of apartheid, there was mass protest, mobilised through the BCM and the SASO. On 16 June 1976 thousands of student protesters took to the streets and were met with violent police brutality, killing hundreds of students (Hirson 1984).³⁵

³² The *Group Areas Act* was built upon the *Native Land Act (1913)*. The most developed areas and prime locations were allocated to whites.

³³ The massacre was one of the biggest catalysts for forming Umkhonto we Sizwe (MK), the militant wing of the ANC, after non-violent resistance seemed futile.

³⁴ Pass laws were abolished, the growth of a black middle class emerged, coloureds and Indians were given voting rights in separate houses of parliament, and laws like the *Immorality Act* and the *Mixed Marriages Act* were dismantled (Christie 1985:54).

³⁵ This became known as the Soweto Uprising.

Fortunes turned at the end of the 1980's when boycotts, divestments and sanctions weakened the South African economy further. In 1989, FW de Klerk became president, unbanning parties like the ANC and PAC and releasing political prisoners. After much negotiation with state, military and businesses, the ANC ran in the first non-racial elections in 1994 and won. However, it eradicated 'all vestiges of Verwoerdian apartheid without changing the fundamental (capitalist) social relations' (Alexander 1993:94). Thus, while political power shifted to Africans, the underlying unequal socio-economic structures were still left intact, and the country shifted from apartheid to neoliberalism (Bond and Garcia 2000; Hamilton 2014; Platzky Miller 2019).³⁶

2.2.3 Education in Apartheid South Africa

Jansen (1990:196–97) summarises five major periods in black educational history in South Africa. The first was *traditional African education* before colonialists arrived. The second was the era of *slave education* based on Christian religious instruction. The third was *mission education* in the early 1800s which introduced a European form of education to the schools. The 1920s then brought the fourth era of *Native education* which introduced the first mandated segregated curricula and finally *Bantu education* was introduced in 1953. Hendrik Verwoerd, the Minister of Native Affairs in South Africa, summarised in 1953 the intended type of education:

'There is no place for him in the European community above the level of certain forms of labour ... What is the use of teaching the Bantu child mathematics when it cannot use it in practice? That is quite absurd. Education must train people in accordance with their opportunities in life, according to the sphere in which they live.' (quoted in Lapping 1987:109)

Bantu education had a dual purpose; the first was to train black people in the skills required to support the extractive economy, and the second was to shape their ideologies through the distortion of their histories, customs and practices, reinforcing their positions as subservient to whites (Jansen 1990:202). The latter purpose sought to make them uncritical thinkers, obedient and submissive (Platzky Miller 2019:80).

³⁶ Drawing on the work of decolonial scholars, the direct oppressive regime may have ended politically, but coloniality (which is unpacked in Section 3.5) lives on in wealth inequality, labour relations, culture, architecture, textbooks and mindsets (Maldonado-Torres 2007).

Mamdani (1996:1) highlights that while colonial projects were more to ‘civilise’ the natives (seen in the 17th century), the strategy in apartheid turned to indirectly controlling and suppressing natives. This change can be seen in apartheid education which shut down missionary schools, limited and tailored the type of knowledge black people would access, normalised their oppression as ‘fixed and natural’, entrenched segregation, enforced native languages, and emphasised tribal identity through ethnic pride (Christie and Collins 1982). Ross (2008:37) highlights that the intense ethnic identities and divisions of South Africans ‘were almost all of nineteenth-century creation’.

In 1959, the *Extension of University Education Act* created segregated ‘tribal colleges’ for blacks which were controlled by the state (Christie 1985:56). This prompted the founding of South African Committee for Higher Education (SACHED), a distance education programme that was revolutionary in its time and context. A small number of black students were able to enrol at London University, and later at the University of South Africa (UNISA), for undergraduate degrees.³⁷ London University only provided examinations and no distance tuition or learner support so SACHED ‘developed its own model of distance education’ which encompassed ‘course materials and the learning environment that would meet the needs of disadvantaged communities’ (Motala 2017:7). Their learner support included academic counselling, study materials, study timetables, contact time with staff, a reading room, and financial support (Motala 2017:3).

While Bantu education was being formulated, white education was also undergoing restructuring through influence from United States universities (Platzky Miller 2019:80). The system transformed from being used for social control to being made marketable and adapted to the needs of business and industry (Nash 2006:5). Individualised competition and career advancement were emphasised, and educational models began to be systematised, standardised, and commodified (ibid.).

³⁷ UNISA was partnered with later because it was first thought of as an organ of the Apartheid regime. However, perceptions changed as it opened its doors to black students and became seen as an alternative to the ‘tribal education’ that promoted ideologies that reinforced suppression and peaceful subjugation (Motala 2017). UNISA is the oldest open university in the world (Kanwar 2013). It has over 400 000 students and is regarded as one of the world’s mega-universities (Kanwar 2013; UNISA 2019)

2.2.4 Education Reforms in Post-1994 South Africa

The first two decades post-1994 saw a number of education reform policies (Jansen 2017:164; M. Young 1990).³⁸ Segregated education was officially dismantled, and constitutional changes guaranteed that, ‘[e]veryone has a right to basic education, including adult basic education’ (McConnachie, Skelton, and McConnachie 2017). Funding for poor schools in historically-black areas increased considerably, essentially providing free education for many students (Dass and Rinquest 2017)³⁹. Regarding the curriculum, Jansen (2019a:1) highlights that educational reforms in this period were shaped by many reformation theories and ‘included terms like anti-apartheid education, liberation pedagogy, reconstruction and development education, and of course that ubiquitous referent, transformation.’ Most notably, before and after the end of apartheid, Paulo Freire’s *Pedagogy of the Oppressed* was a key influence (Criticos 1993; Naidoo 2015).

With the vision of improving basic education to represent the new democratic South Africa, Outcome-Based Education (OBE) was proposed in 1997 (Botha 2002; Chisholm et al. 2000; Jansen and Christie 1999).⁴⁰ While it placed a strong emphasis developing a new improved curriculum, its *application* in varied socio-cultural settings was not taken into account (Botha 2002:367). Poorly-resourced government schools were not adequately equipped and lacked teacher training in learner-centred OBE pedagogies (Botha 2002; Chisholm et al. 2000:4–12).⁴¹ Smaller steps were needed to transition into a new education system as the OBE philosophy was based on international movements in education that were not contextualised to South Africa (Botha 2002:367). With the explosion of enrolments, high drop-out and failure rates, inadequate finances, under-resourced schools, shortage of educational materials, and underpaid and inadequately trained teachers, basic education remains in dire need of improvement (ibid.).⁴²

³⁸ There are four authors referenced with the surname ‘Young’. M. Young (1990) refers to Michael Young whereas I. Young (1990) refers to Iris Young.

³⁹ In Apartheid, funding for schooling was weighted at R1211 for a white learner and R146 for a black learner. In the new system, schools were split into 5 quintiles, based on location. Quintile 1 – 3 were rated as no-fee paying schools. The location-based quintile system reached many poor schools in black areas, but it was not perfect, and some have been left out (McConnachie, Skelton, and McConnachie 2017).

⁴⁰ OBE constituted a ‘radical break’ from the educational approaches of the former regime and it attempted to develop investigative, creative and problem solving skills, over prior content-based approaches (Botha 2002:362).

⁴¹ Botha (2002) also outlines that older teachers were still entrenched in the old education system and its Eurocentric paradigm.

⁴² OBE underwent several iterations thereafter. These iterations attempted to improve OBE by reducing the number of outcomes and giving more guidance on what and how to teach. However, each new iteration required teacher training which seldom happened to the extent it was needed.

In higher education, academics and policymakers gave considerable thought to issues of identity, culture, language and globalisation in higher education (Cloete, Makgoba, and Ekong 1997; Makgoba and Seepe 2004). Additionally, epistemological considerations regarding African knowledge and the role of African universities had been interrogated (Lansink 2004; Nyamnjoh 2004; Prah 2004; Waghid 2002). Although these discussions have translated into reform to some extent (Cooper 2015), the higher education space has increasingly become more industry-focused in line with a neoliberal vision (Bond and Garcia 2000; Vally 2007).

In terms of access, there has been a mass increase in Africans at historically-Indian and -coloured universities as well as historically-white Technikons. However, intake of Africans in historically-white universities remains much lower. Conditions drastically differ between historically whites universities (HWUs) and historically black universities (HBUs), where the latter are severely under-resourced and have poor infrastructure (Jansen 2003; Langa et al. 2017; Nash 2006) In 2012, white students were still the largest group in three of the country's main HWUs: the University of Cape Town (UCT) (34%), the University of Stellenbosch (68%), and the University of Pretoria (54%) (Cooper 2015:254).⁴³ The completion rates of white students are 50% higher than that of black students (Swartz et al. 2018:4).

The 2017 Higher Education and Skills Report (Maluleke 2019:27) highlighted that half of the 2.8 million youth not in any educational institutions, were not attending 'because they had no money for fees'.⁴⁴ A further 18% 'could not study because of poor academic performance.' Factors that contribute to sustained inequality in higher education include inequalities in basic education that limits further education choices, high tuition fees, alienating institutional culture and lack of academic, career and emotional support (Cooper 2015; Maluleke 2019; Swartz et al. 2018).

Beyond the education sector, inequality in the country increased. Despite Black Economic Empowerment (BEE)⁴⁵, unemployment went from 14% in 1993 to 29% in 2001 (Finn, Leibbrandt, and Oosthuizen 2014:2). As of 2019, the unemployment rate is 29.1% and youth unemployment is at 58.2%. (Trading Economics 2020). New class dynamics have emerged

⁴³ The University of Witwatersrand (Wits) notably had 43% African (South African) students as its largest group by race (Cooper 2015:254).

⁴⁴ This means that 1.4 million youth aged 18-24 were not attending due to lack of financial resources.

⁴⁵ BEE is an affirmative action policy to redress inequalities. This is done through giving black people (this includes African, Indian, Coloured and Chinese) economic privileges (e.g. employment preferences) over whites. Broad-based Black Economic Empowerment (BBBEE) is an amendment of the BEE Act.

with a black capitalist elite that are strongly interlinked with political power (Finn et al. 2014:6; Southall 2014). Access to higher education remains the primary key to escaping poverty (ibid.).⁴⁶

2.2.5 Contemporary Decolonial Student Movements

South Africa has a strong history of counter-hegemonic movements, particularly ones led by student-activists (such as the BCM). In 2015, university student protests broke out for decolonised education, under the banner of #RhodesMustFall. A statue at UCT commemorating Rhodes was the centre of this movement, as a symbol of institutional racism and a culturally alienating university environment (Chikane 2018a; Kamanzi 2015; Nyamnjoh 2016). Students drew on the work of Frantz Fanon, Steve Biko, the BCM and other counter-hegemonic movements. This evolved into a mass student movement, #FeesMustFall in 2015 and 2016 demanding free, quality, decolonised education (Ahmed 2017). These protests expressed students' disillusionment with rainbow nation politics⁴⁷ and sought to change structural inequalities in access to higher education; high tuition fees; Euro-centric curricula and pedagogies; a lack of African history and culture that reflected their personal histories and identities; and racist institutional structure, culture and aesthetics (Chikane 2018a, 2018b; Gibson 2017; Lange 2019; RMF 2015:8). Beyond this, student demands across universities also included ending the outsourcing of workers; clearing of student debts; bringing back expelled and suspended students; de-militarising the police and private security presence on campuses; and free sanitary pads and tampons (Moosa 2016). Overall, students highlighted their disillusionment with the lack of socio-economic, racial, cultural and epistemological reformation of their universities (Chikane 2018b; Heleta 2016)

Moreover, HBUs and HWUs had different demands, highlighting that 'many universities are still marked by differences based on the material, cultural and social positions of their separate histories' (Langa et al. 2017:abstract). Demands from HBUs specifically focused on free education for the poor and middle class, subsidised by the wealthy. Their demands also included requests for 10 GB of data (whereas HWUs have free WIFI), safe and decent accommodation with cooking facilities, and increase of library textbooks (ibid.). HBUs had

⁴⁶ Although graduate unemployment is a concern in South Africa, those with a degree are far more likely to find employment, particularly better paid employment. (Van der Berg and Van Broekhuizen 2012)

⁴⁷ Rainbow nation is a term used in South Africa that refers to putting aside differences and uniting together as one people.

been protesting for these for many years prior to the #FeesMustFall protests, but only got the media attention when HWUs began protesting too (Langa et al. 2017:6).

The student protests sparked heated and pertinent debates and discussions around educational reform between students, activists, journalists, academics, and university senior management in the country (Chikane 2018a; Heleta 2016; Jansen 2019a; Langa et al. 2017; Mamdani 2016; Mbembe 2016; Nyamnjoh 2016; Ramaru 2017).⁴⁸ With various discourses, meanings and viewpoints on decolonisation, Jansen's (2017:163–67) work is useful in understanding the movement; I draw on three crucial 'Fallist' positions of the six he outlines.⁴⁹ The first argues for an absolute *replacement* of European knowledge by local and/or indigenous knowledges. This extreme stance allows for marginalised knowledges to be reclaimed but runs the risk of nativism and fundamentalism (Mamdani 2016). The second argues for the decentring of European knowledge and *recentering* of local and indigenous knowledges. The caution with this is romanticising local and indigenous knowledges as infallible (Hodgkinson-Williams et al. 2017). The last stance argues that knowledges are entangled and inseparable in a way that is not regional, but rather travelling across space, and evolving with time, such that knowledges are better engaged with thematically rather than regionally.

While I draw on the work of Jansen (2017, 2019a) and appreciate his critical analyses of decolonisation student movements, his work primarily focuses on a *decolonised curriculum*, ignoring other issues raised by the student movements (Jansen 2017:154). By decoupling curriculum issues from students' other broad-ranging concerns on institutional structure and culture, he creates a strawman argument by emphasising that many problems, such as teachers' mindsets and pedagogical practices, will not be solved by revising curriculum alone:

'[t]eachers interpret the curriculum to students based on their own experiences, backgrounds, politics and preferences. The advocates of decolonisation do not dwell on this space for too long, for their concern is limited: what to 'put into' the curriculum' (Jansen 2017:169).

⁴⁸ For example, Mbembe (2016) questions the limits of decolonisation of education in light of neoliberalism, Heleta (2016) traces the the roots of Eurocentrism and epistemic violence at universities in South Africa, Ramaru (2017) gives her feminist reflections of the #RhodesMustFall movement, and Mamdani (2019) interrogates the dynamics between relevance and excellence, place versus ideas, and justice against academic freedom. These debates are unpacked in depth in Section 3.5.3.

⁴⁹ 'Fallist' is the term given to those students and academics who protested in or support the #RhodesMustFall and #FeesMustFall movements.

The reason I highlight this point is because the former part of his statement is useful in understanding how teachers' identities impact learning, however, the latter part overlooks the broad-ranging issues that students raised, particularly issues of cultural dissonance, institutional racism and the lack of black academic and senior management (RMF 2015:6; Swartz et al. 2018:36–27). These discussions and other critical reflections on decolonial thought will be unpacked in more detail in Section 3.5.3 as the purpose of this section is simply to outline decolonisation of education as a turn in South African higher education reformation.

Having discussed injustices in the historical context of South Africa, the following sections provide a literature review of the Open Education Movement and MOOCs, reviewing the inequalities present in these movements, among other factors.

2.3 The Open Education Movement

2.3.1 The Digital Divide

Before unpacking the Open Education Movement (OEM), it needs to be contextualised within the digital divide. In 'Rethinking the Digital Divide', Warschauer (2003:6) argues:

'Meaningful access to ICT comprises far more than merely providing computers and internet connections. Access to ICT is embedded in a complex array of factors encompassing physical, digital, human and social resources and relationships. Content and language, literacy and education, and community and institutional structures must all be taken into account.'

Graham et al. (2015) similarly define five categories of barriers of information equality: representation, contribution, access to information, connectivity, and non-neutral networks/technologies. Thus, the problem of connectivity is not just a technological challenge but a socio-technical one (Graham et al. 2015). Drawing on this, although Sub-Saharan Africa now has a virtual 'presence', it still does not participate at parity in the sense of authorship, voices, narratives and contributions (Graham et al. 2015), exacerbating 'existential inequality' (Czerniewicz 2018:6).⁵⁰

Rohs and Ganz (2015) use Knowledge Gap Theory, which argues that information is absorbed differently by recipients depending on their socio-economic (Tichenor, Donohue, and Olien

⁵⁰ Czerniewicz (2018) outlines that existential inequality comprises five dimensions: self-development, autonomy, freedom, dignity and respect.

1970),⁵¹ to identify three aspects in relation to the digital divide: the Access Gap, Usage Gap and Reception Gap. Regarding the Access Gap, as of 2019, only 39.6% of Africans have internet access compared to 87.7% of Europe and 95% of North Americans.⁵² This disparity is mainly attributed to lack of resources and infrastructure. Where facilities exist, there are inequalities in bandwidth distribution, price and internet speed, which are further shaped by socio-economic factors of gender, age, employment, educational background, neighbourhood and household income (Rohs and Ganz 2015).⁵³ The Usage Gap refers to how those with access make use of the internet and its opportunities. This usage depends on, and is limited by, the individual's basic computer literacy skills, educational level and languages spoken, among other factors (Rohs and Ganz 2015). The Reception Gap deals with the individual's ability to interpret information. Information literacy is needed in searching and sorting through for relevant content through the flood of information available (Liyanagunawardena, Williams, and Adams 2013). Thus, those with higher socio-economic status can better extract greater benefits from the educational possibilities available.

Given that those of higher socio-economic status generally benefit greater from access to digital technology, thereby reproducing and reinforcing existing inequalities, the following sections discuss the OEM and MOOCs.

2.3.2 History of Openness

Openness has its roots in many fields such as open-source software, open design, open data and open government (i.e. transparency of government documents and proceedings) (Weller 2014:1; Wiley 2016). Open *education*, focused on here, is a term that has evolved over time and 'covers a range of philosophies and practices aimed at widening access to education for those wishing to learn' (Weller et al. 2018:109). Since the 1960's, open education has manifested in different movements, namely; open education in schools, distance education and open learning, e-learning and online education, open access publishing, Open Educational

⁵¹ The Knowledge Gap theory highlights the privileges that those with higher socio-economic have, and how these factors interrelate and reinforce each other: 1.) better *communication skills* in terms of reading and understanding; 2.) broader *existing knowledge base* due to formal education; 3.) more *social contacts* of those in the same class that lead to knowledge exchange about relevant topics; 4.) ability to *select and sort information* and lastly; 5.) *access to official media* (Rohs and Ganz 2015).

⁵² These statistics were obtained from <https://www.internetworldstats.com/stats2.htm>

⁵³ Furthermore, the intersection of these factors reinforce inequality. For example, in developed countries the gender gap for access to connectivity is marginal at 2.3%, but in developing countries that gap is 7.6%, in both cases men having more access to than women (ITU 2016).

Resources (OER), open practices, social media and MOOCs⁵⁴ (Jordan and Weller 2017). Despite a history in distance education, the digitised and online aspects has shaped and catalysed open education today (Farrow 2017:131). Thus, the current focus is traceable to the OER movement, particularly MIT's OpenCourseWare site which started in 2001 (Weller 2014:6).

A well-accepted definition of OER is outlined by UNESCO (2002):

‘teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions’

The foundational legal aspect of OER is the “5Rs Framework” (Wiley 2011a). Users must be able to Retain, Reuse, Revise, Remix, and Redistribute for something to be deemed ‘open’.⁵⁵

Since 2007, Open Educational Practices (OEP) have become more popular, and connect the various movements of open education (Jordan and Weller 2017; Weller et al. 2018). OEP are much less defined, but shift focus from content and access to practices and processes (Ehlers 2011; Geser 2007; Knox 2013:21; Weller 2011). Cronin (2017:18) outlines OEP as:

‘collaborative practices that include the creation, use, and reuse of OER, as well as pedagogical practices employing participatory technologies and social networks for interaction, peer-learning, knowledge creation, and empowerment of learners.’⁵⁶

OEPs such as critical pedagogy and non-hierarchical learning can be used as a means to equalise imbalances in knowledge production (Bali 2014; Farrow 2017). These are discussed further in Section 2.4.4.

⁵⁴ Not all MOOCs would not meet the basic definition of open outlined by Wiley (2011a), but are usually discussed under the open banner.

⁵⁵ Haßler and Mays (2015) push the definition of open content beyond legal freedom to *technological* freedom, and freedom in terms of *education and participation*, however the legal freedom is still seen as the entry point in defining whether something is open or not. *Technological freedom* relates to ensuring that software and technological limitations of accessing the content is removed, such as the use of proprietary software or not making the content backward compatible. Freedom in terms of *education and participation* requires knowledge exchange to the level of critical engagement, discussion and reasoning.

⁵⁶ This definition ties together earlier definitions of OEP that focus on OEP in relation to OER (Ehlers 2011), OEP in relation to on open pedagogies and social learning (Casey and Evans 2011) and OEP that address issues of power relations and inequality (Czerniewicz et al. 2017)

2.3.3 OER in the Global South

In terms of OER production, Santos-Hermosa et al. (2017, 106) calculate that 89% of Repositories⁵⁷ of Open Educational Resources (OER) come from Europe and North America, with only 1% from Africa. This is consistent with Bozkurt et al. (2018:84–85) who highlight the dominance of open education publications from the UK, USA, Spain and Australia, leading them to ask, ‘Can openness in education serve as a mean to democratise education in developing countries ... when the research is predominantly conducted elsewhere?’

Factors that inhibit the Global South fully engaging in OER include connectivity issues, inadequate resources (besides OERs), lack of support for educators, lack of accommodation of local cultural and institutional practices, and lack of sustainable funding (de los Arcos and Weller 2018; Thakrar, Wolfenden, and Zinn 2009). The recent Research on Open Educational Resources for Development (ROER4D) project showed that despite adaptation being a core element of engaging with OER, ‘educators in the Global South seem to be relying heavily on OER created in the Global North for use in their original form, thereby unwittingly reinforcing Northern epistemic hegemony.’ (Hodgkinson-Williams et al. 2017:57). Reuse ‘as is’, coupled with the dominance of English OER, ‘sustains Anglo-linguistic preeminence.’ (Hodgkinson-Williams et al. 2017:57). Moreover, already renowned institutions maintain their power and prominence because educators depend on ‘the perceived reputation of the institutions or organisations from which the OER originates as a benchmark of quality assurance.’ (Hodgkinson-Williams et al. 2017:59).

2.4 MOOCs

2.4.1 Evolution of MOOCs

MOOCs are large-scale, online courses aimed broadly at a dispersed participant pool (Daniel 2012). In 2019, over 13500 MOOCs existed, with 110 million students, and partnerships with over 900 universities (Shah 2019a).⁵⁸ While some earlier versions of MOOCs displayed great similarity with, and emerged out of the OER movement, later versions diverge considerably from standards of ‘openness’ based on whether they are for-profit, free-to-access, open-source, have certification fees, and/or carry institutional credits. These later MOOC providers often

⁵⁷ Santos-Hermosa et al. (2017) define a repository as having more than 50 resources and limit the study to English.

⁵⁸ Statistics provided by Shah (2019a) do not include China.

take on a ‘year zero’ mentality,⁵⁹ assuming a sudden discovery in online learning and its methods, without recognition of prior work in fields of open, distance and online learning (Weller 2014:128; Weller et al. 2018:121).

MOOCs vary in type: they can be ‘inward’ student-facing or ‘outward’ public-facing, semi-formal or non-formal,⁶⁰ and can vary in purpose from showcasing renowned professors or cutting-edge research to providing gateway skills to prospective undergraduates (Czerniewicz et al. 2014). MOOCs were generally classified as cMOOC (connectivist MOOC) or xMOOC (eXtended MOOCs), although they now lie on the spectrum between the two taxonomies. cMOOCs typically utilise horizontal, connectivist pedagogies (Downes 2008). In this approach, learning is understood as engagement through sharing and reflecting with others, such as through blogs or tweets. Focus is less on *what* is learnt but *how* it is learnt, i.e. through networks and connectivity (Mackness and Bell 2015:31). xMOOCs tend to be structured around lecturer-centred teaching, recorded in a digital form, where knowledge of predefined learning objectives is transferred didactically and is assessed predominantly through automated grading or peer assessment (Patru and Balaji 2016:54).⁶¹ Hybrid MOOCs are becoming more common; they leverage xMOOC platforms that provides structure, narrative and resources, yet decentre the role of the teacher as the expert and encourage connectivist philosophies such as learning through peer networks (Ross et al. 2014).⁶² MOOCs can also use blended learning models,⁶³ such as MOOC wrapping,⁶⁴ where face-to-face elements are incorporated (Deacon et al. 2018; Patru and Balaji 2016). Alongside MOOCs, other open education platforms exist such as Khan Academy, Peer-to-Peer University (P2PU) and Alison, which offer self-paced curated content that is not connected to a university system or instructor/facilitator.

⁵⁹ The heading of the section as ‘evolution’ is to deliberately challenge the notion of MOOCs as a ‘revolution’ through disruptive innovation (Daniel 2014)

⁶⁰ Formality would likely include accreditation, which will likely require the student to pay fees, thus changing the nature from a MOOC into a formal online course.

⁶¹ Further variations of MOOCs exist such as SPOCs (Small Private Online Courses), DOCCs (Distributed Open Collaborative Courses), SOOCs (Social Online Open Courses), POOCs (Participatory Open Online Courses), BOOCs (Big/Boutique Open Online Courses), ROOCs (Regional Open Online Courses) and others.

⁶² There are three authors referenced in this research with the surname ‘Ross’. Ross et al (2014) refers to Jen Ross.

⁶³ Blended learning involves an integration of online and face-to-face approaches. (Patru and Balaji 2016)

⁶⁴ Wrapping is a form of blended learning used in MOOCs which involves the use of in-person learning groups which may or may not be done by the MOOC design team (Deacon et al. 2018).

As of 2018, at least 41 MOOC platforms were showcased on Class Central (Shah 2018), and 108 on MOOC List (MOOC List 2018).⁶⁵ The most popular MOOC platforms originate from elite universities or from Silicon Valley corporations (see Table 2-1).⁶⁶

Table 2-1 List of major MOOC platforms on Class Central in 2018

Platforms	Founding Partners	Students	Additional
Coursera	Stanford University, University of Pennsylvania, and Johns Hopkins University	≈37 million	<ul style="list-style-type: none"> - New paid subscription model - Offers an iMBA - Partnered with Google, World Bank, CISCO, BCG, Intel
edX	Massachusetts Institute of Technology, Harvard University, and UC Berkeley	≈18 million	<ul style="list-style-type: none"> - Non-profit and open-source platform software (Open edX) - High partnering fees - Partnered with Microsoft, IBM - Lecturer-centric - Micro-masters
XuetangX	Tsinghua University	≈14 million	<ul style="list-style-type: none"> - Facilitates self-produced content by students - Focuses on interactivity and blended learning - Created though revamping Open edX
Udacity	Stanford University, Google, Facebook, AT&T	≈10 million	<ul style="list-style-type: none"> - Commercial revenue model - Nano-degree program - Partners include BMW, Amazon, IBM
Futurelearn	Open University	≈8.7 million	<ul style="list-style-type: none"> - Student-centric - Top 200 universities can access - Many specialist organisation partners
>28 other platforms		>13.3 million	<ul style="list-style-type: none"> - Many are termed 'regional' and 'country-specific' - Majority use Open edX

Source: Author's own table, compiled from information in Shah (2018)

Since 2015, numerous MOOC platforms have emerged from countries other than the USA and UK, and in diverse languages, e.g. XuetangX (China), MiríadaX (Spain), MéxicoX (Mexico), France Université Numérique (France), EduOpen (Italy), ThaiMOOC (Thailand), SWAYAM (India), and Edraak (Jordan) (Shah 2017). These platforms are termed 'country-specific' and

⁶⁵ Class Central and MOOC List are both MOOC search engines; they aggregate MOOCs from various platforms into one place.

⁶⁶ While 2019 statistics have been released, they exclude MOOCs from China in the analysis. Thus, the 2018 statistics are used here, which do include China. A notable occurrence in the 2019 statistics is that SWAYAM, an Indian MOOC platform, became one of the top MOOC providers after a merge between NPTEL and SWAYAM (Shah 2019a).

‘regional’ while the platforms from the US and UK are termed ‘global’ (Shah 2017), presumably because they are in English. Of approximately 9600 MOOCs in existence in 2017, more than half are produced in English, followed by Mandarin Chinese and Spanish (Adam 2019).⁶⁷ The Open edX platform has made it possible for approximately 1600 small-scale MOOC platforms to exist (Future Trends Forum 2018), but also embeds edX’s lecturer-centric pedagogy into these platforms.⁶⁸

2.4.2 MOOC Production from Sub-Saharan Africa

In my earlier research in 2017, 15 out of the 100 university partners, and 164 of the 2240 courses (7.3%), were from the Global South (Adam 2019). To date, few MOOCs from Africa exist and most of these emerge from South Africa.⁶⁹ Reasons for low MOOC production include overworked staff, lack of funding for technology and software required, lack of staff skilled in technological and instructional design,⁷⁰ high production costs and prioritisation of funds for more urgent needs (Conole 2015a).

Currently, MOOCs *relating to* Africa are produced in three main ways (Adam 2019). Firstly, African universities can partner with an existing MOOC platform. This has been the case in South Africa with universities that are internationally ranked, have funding, or are home to renowned professors (ibid.). UCT, being highly ranked internationally, were eligible to partner with platforms like Coursera and FutureLearn (ibid.). The University of the Witwatersrand, which is not top-ranked internationally but had sufficient funding, was able pay for membership on edX (Bayes-Brown 2014). The University of Stellenbosch was not top-ranked but joined FutureLearn initially as a ‘centre of excellence’, showcasing a renowned professor (FutureLearn 2019).⁷¹

In the second case, a US or European institution, with funding and resources, partners with an African institution to ‘co-create’ the MOOC. One such example is between the Open University and TESSA (Teacher Education in Sub-Saharan Africa) in the ‘Making Teacher

⁶⁷ This was determined through approximations from information provided on Class Central (Shah 2017). At least 5100 MOOCs are produced in English.

⁶⁸ XuetangX from China has completely revamped the Open edX backend and offers a re-envisioning of the MOOC space, with a bustling community section and a channel for self-produced content (Shah 2016).

⁶⁹ Due to the arrival of settler-colonisers, South Africa developed better infrastructure in comparison to the rest of the continent. Today it is one of the most industrialised and diversified economies on the continent and is categorised as an upper-middle income economy by the World Bank (2020). Consequently, South Africa is often an outlier when compared to other African economies.

⁷⁰ Hiring staff who do have these skills would be an additional cost.

⁷¹ This will be discussed more in Section 9.2.2 when limitations in platform choices are interrogated.

Education Relevant for 21st Century Africa’ course on FutureLearn (FutureLearn 2018b).⁷² Partnerships can also happen with institutions like The World Bank such as in their New Economy Skills for Africa Program-ICT (NESAP-ICT) with Coursera (Trucano 2013). As well-intentioned as such partnerships can be, they can be undermined by power imbalances, as well as issues like funding rules and Eurocentric methodologies (Smith 2012; Thiong’o 2005).⁷³

The third case is MOOCs created about Africa by a non-African university, without partnerships to any African institution. In 2018, nine out of twelve MOOCs relating to Africa were not from Africa; the remaining three were from South African universities (Adam 2019).⁷⁴ This demonstrates the high production imbalance of MOOCs about Africa. One example of this is the University of Aberdeen’s ‘Africa: Sustainable Development for All?’ MOOC (FutureLearn 2018a).⁷⁵ In such courses, Africans may be included tokenistically as subjects of research through interviews, or in footage of nameless impoverished families, but not as collaborators who can influence what questions are asked nor shape the production of the MOOC. This can lead to stereotyping and stigmatising. The point here is not that MOOCs relating to Africa need to come *exclusively* from its geographic location, but that Africans should play a large role in producing content about Africa and for African needs, else there is risk of others usurping African narratives or presuming they know the needs of Africans. This can lead to reproducing patronising colonial tendencies and dependency models.

No distinct MOOC platform from Africa exists due to high costs and server limitations.⁷⁶ Many private education institutions offer low-cost paid online courses, with partially or fully free

⁷² Another example is the partnership between École Polytechnique Fédérale de Lausanne (EPFL) and 15 African universities through the MOOCs4DEV programme (Gloy 2018; Noukakis, Escher, and Aebischer 2016).

⁷³ Thiong’o (2005) problematises such a relationship where data is collected by the ‘native informants; call them research assistants’, whilst the methodology and theorisation is done by the ‘colonial intellectual’ according to their ‘conceptualisation of the world’.

⁷⁴ This was done through a keyword search on Class Central for MOOCs with ‘Africa’ in the title.

⁷⁵ The MOOCs introduction video opens with an older European woman speaking about Africa, with the University of Aberdeen as the backdrop. It then goes on to show pictures from Africa whilst emphasising how the course will give access to experts at the University of Aberdeen. The course does not intend to, but it creates a subject-expert vs subject divide. Despite the topic being Africa, the centring of the University of Aberdeen would make an African participant feel that that is where knowledge lies, and theorisation happens, rather than where they are.

⁷⁶ In 2015 The African Virtual University attempted to launch the first African MOOC platform, however upon researching the site, only 5 archived courses exist: https://avu.org/avuwweb/avu_newsletters/launch-of-avu-mooc-platform/. A similar scenario is seen with the National Open University of Nigeria with only 1 course on it: <https://www.nounmooc.org/>. If there are others, they do not surface on a Google search for ‘Africa MOOC Platform’

courses, such as SlateCube⁷⁷ and Beni African University in Nigeria⁷⁸. Contrary to principles of openness, paid courses generate revenue for the production of ground-up locally-relevant courses. Getsmarter, a South African company, offers relatively expensive online courses, costing upwards of £2000, from prestigious universities with no focus on catering to the needs of marginalised.⁷⁹ Udemy, although for-profit, is built in Turkey and has a strong culturally diverse approach with low-cost courses from people in all parts of the world, also putting a variety of locally-created African language courses online (Udemy 2018).⁸⁰

2.4.3 MOOC Access, Inclusion and Diversity

MOOCs increase access in a number of ways; they are free to access, they have no prerequisite conditions, they provide high-quality, curated learning materials from experts in the field that may not have otherwise been found or created,⁸¹ and they provide flexibility in learning, accommodating those who are working and raising children (Palmer 2015). In rural areas or conflict zones where mobility is not easy or safe, they may provide some level of access to content (Moser-Mercer 2014). Additionally, the technological designs of MOOC platforms strive to include people with disabilities, and it is now common practice to include features like transcripts (Draffan et al. 2015).

This is all accessible ‘as long as you have an internet connection’ (Palmer 2015), which is not the case for many people in the Global South (Laurillard and Kennedy 2017). Technological barriers for participants to access MOOCs include lack of ICT infrastructure, lack of devices, high data costs, low digital and internet literacy, and lack of skilled ICT professionals to maintain equipment and provide support (Richards and Diallo 2015). However, as mobile penetration increases, access to online learning is becoming more realisable (Laurillard and Kennedy 2017:14). Bali and Sharma (2017:26) outlines that ‘learners beyond the global centres are unlikely to reach the potential promise of MOOCs due to a number of barriers, particularly economic, linguistic and epistemological’. Educational and linguistic challenges include low education levels; low literacy levels; low proficiency in English or other ‘global’ languages used by most MOOCs; and limited experience with distance and self-directed learning (Castillo

⁷⁷ More information about SlateCube can be found at: <https://www.slatecube.com/>.

⁷⁸ More information about Beni African University can be found at: <http://www.gbam.tv/celebrity-news/gossy-ukanwoke-founder-first-online-university-nigeria>.

⁷⁹ GetSmarter offers online courses from MIT, University of Oxford, Harvard University, Yale, London School of Economics, University of Cambridge, UC Berkeley, and UCT. More information about GetSmarter can be found at: <https://www.getsmarter.com/>.

⁸⁰ On Udemy, one can learn Twi from Ghana or isiXhosa from South Africa (Udemy 2018). More information about Udemy can be found at: <https://www.udemy.com/>.

⁸¹ This factor particularly refers to xMOOCs.

et al. 2015; Liyanagunawardena, Williams, et al. 2013). Beyond this is the lack of local and cultural relevance of MOOCs to varied contexts (Castillo et al. 2015), and the cost of opportunities forgone elsewhere (Daniel 2012).

Although MOOC platforms philanthropically claim to promote democratised access to ‘global’ knowledge (Rohs and Ganz 2015), Christensen et al. (2013) found, from reviewing 32 MOOCs on Coursera, that 79.4% of students had a bachelor’s degree or higher. Emanuel (2013:342) highlighted that in emerging countries,⁸² ‘almost 80% of MOOC students come from the wealthiest and most well-educated 6% of the population.’ In 2017, Cheney (2017) reported that 45% of Coursera’s 24 million participants came from the Global South, showing improvement. However, most recent statistics from a review of all courses on MIT and Harvard MOOCs on edX, seen in Table 2-2, show that unequal access between countries of higher and lower Human Development Indexes (HDI)⁸³ still exists (Reich and Ruipérez-Valiente 2019).

Table 2-2 Enrolment and completion rates for 2017-2018 based on all Harvard and MIT edX courses.

Country HDI	No. of enrolments	No. of Certifications	% enrolments within year	% certified within year
Very High	954426	14341	55.58	68.7
High	305950	3322	17.82	15.93
Medium	401982	2912	23.41	13.95
Low	54975	298	3.2	1.43

Source: Supplementary Material in Reich and Ruipérez-Valiente (2019)

As demonstrated in Table 2-2, completion rates are far lower in countries with lower HDIs. Jordan (2015) highlighted that the median completion rate in 2015 was 12.6% and further studies in 2019 show that it has reduced below 10% (Reich and Ruipérez-Valiente 2019). As completion was initially used as a success metric for MOOCs, this was originally a major concern in the MOOC community. However, newer discussions perceive MOOCs through a ‘drop-in’ model where participants come to take what they wish to and leave, and emphasis is placed on engagement rather than completion (Kolowich 2013; Murray 2019). This indicates

⁸² The countries relating to this statistic are Brazil, Russia, India, China and South Africa. The study reviewed 32 courses on Coursera, spanning 200 countries. These are emerging countries which means that the situation is likely to be worse in low-income countries.

⁸³ HDI is a country composite measure provided by the UN based on three dimensions: a long and healthy life (life expectancy index), knowledge (education index) and a decent standard of living (gross national income [GNI] index) (UNDP n.d.)

that MOOCs are intended as supplementary courses for degree holders, rather than for those seeking a more robust education, as would more likely be the case for participants from developing countries.

Beyond access is the issue of inclusion, and by extension diversity. Current MOOC platforms from the Global North tend to export standardised education to a diverse and complex pool of global participants, overlooking the diverse knowledges existing amongst these participants (Knox 2016:82; Patru and Balaji 2016:11). By promoting hegemonic Western knowledge systems, this poses a further threat to dwindling heterogeneous, diversified global knowledge systems (Czerniewicz et al. 2014:124). Thus xMOOCs ironically tend to limit the ideals and aims of emancipatory and affirmative education, the very thing they claim to offer (Knox 2016:16).

Bali (2018) further cautions against tokenistic inclusion through incidental ‘patchwork’ references to other cultures whilst still reifying dominant worldviews. Inclusion needs to be factored from the inception of the MOOC through considering contextual, cultural and material differences between participants, particularly those of marginalised groups (ibid.). This involves more learner-centred approaches where learners participate in decision-making and knowledge production throughout the learning process (Bali and Sharma 2017).

Beyond ‘simply creating the space and inviting everyone to it’ (Bali 2018:306), inclusivity needs to go further to *support* and remove barriers for those that are ‘not equitably positioned in their capacity to take up these benefits’ (Keddie 2012:266). Reich and Ruipérez-Valiente (2019) argue that while technological solutions can offer some level of support, ‘human connections through advisers, tutors, and peer groups provide the most important student supports.’ Similarly, Lambert (2019) found that open educational programmes in developing countries were most successful when implemented with some form of learner support e.g. through blended-learning models or face-to-face study groups. Partnering with local community groups who understand the needs of the marginalised learners provides more sustainable learner support (Lambert 2019; Laurillard and Kennedy 2017).

Exclusion is also a concern in MOOCs. Who is allowed access to MOOCs, and who gives this access, creates unequal power relations. Regions such as Crimea, Sudan, Iran, Cuba, Syria, North Korea and Somalia, for example, have faced bans from accessing MOOCs due to U.S.

sanctions (Lockley 2018; Ware 2014). Thus, as they host the major servers of edX and Coursera,⁸⁴ the U.S. has control over who can access ‘open’ education and who cannot.

2.4.4 MOOC Power Structures, Pedagogies and Participatory Practices

The ability to learn from and engage with a diverse participant pool in a MOOC is highly dependent on the MOOC’s power structure i.e. who controls power in the educational setting (Crosslin 2016). The power structure used is based on the MOOC designers personal or disciplinary epistemological viewpoints i.e. objectivist or subjectivist stances, which influences the pedagogical approach taken in a MOOC (Crosslin 2016; Ross et al. 2014).⁸⁵ Drawing on the cathedral and bazaar analogy of Raymond (2001), Farrow (2017) describes the vertical cathedral power structure as a top-down dissemination model where authority and decision-making power lie in the hands of a few, while the horizontal bazaar model is open to a wider range of people and public scrutiny, thus harnessing of collective intelligence.

Crosslin (2016) similarly outlines three power structures and corresponding pedagogies that are prevalent in MOOCs: expert instructor (instructivism/cognitive-behaviourism), expert instructor and active guided participant (constructivism and/or social constructivism), and distributed expertise of a collective group (connectivism).⁸⁶ While MOOC platforms were originally associated with instructivism, they include constructivist and social constructivist⁸⁷ pedagogies, and it would be too simplistic to class all xMOOCs as the same (Stewart 2013).

Crosslin (2016) argues that no pedagogical approach is better and each approach is better suited to achieving different aims. When expert knowledge needs to be gained from an educator, instructivist approaches are better, whereas if more can be gained from reflection and self-discovery, a constructivist approach may be more suitable (ibid.). If it is beneficial to engage and interact with others on a given topic, a social constructivist or connectivist approach would be more suited. MOOCs may have one dominant power structure but may draw on a combination of pedagogical approaches at different points in the MOOC (ibid.).

Although instructivist approaches have been extensively critiqued for their unidirectional transfer of content to the world (Knox 2016:82), connectivist approaches also have their

⁸⁴ Even FutureLearn in the U.K. has adhered to U.S. regulations (FutureLearn 2017).

⁸⁵ While these decisions are made by the MOOC designers, it is argued in Chapter 9 that MOOC platforms play a large role in setting the standard pedagogical approach. MOOC designers need to make concerted efforts to incorporate other approaches if they wish to.

⁸⁶ These power structures and pedagogies are explained more detail in Chapter 9, when discussing findings.

⁸⁷ FutureLearn, for example, centres itself around social learning which is directly connected to social constructivism (FutureLearn n.d.)

shortcomings (Goldie 2016). Criticism of connectivism is that learning becomes too overloaded, unstructured and chaotic with floods of information, and require high levels of self-directed learning (Liyanagunawardena, Williams, et al. 2013). This can negatively impact participants who lack sufficient support and can depress participants' motivation (ibid.). In large-scale crowd-based learning, isolated small group clusters may form, limiting opportunities for 'global' exchange (Gillani et al. 2014), and in other cases participants may feel like their opinions are going unheard (Brennan 2013). cMOOCs can leave unprepared participants feeling alone and isolated, unable to meaningfully connect with others, and feeling over-pressured to engage with community (Brennan 2013; Mackness and Bell 2015:32).

In challenging vertical power structures, the call for critical pedagogy in open education challenges 'dominant economic and/or socio-political force[s] in education' (Farrow 2017:139). Critical pedagogy rejects the idea that knowledge is neutral, arguing instead that it is inherently political (Freire 1970; Habermas 1971). Ross (2018:2)⁸⁸ describes critical pedagogy as 'a tool to expose and deconstruct cultural hegemony, the idea that the ruling elite manipulates social mores so that their view becomes the dominant worldview.' The approach encourages learners to question the roots of knowledge production and validation, breaking knowledge hierarchies and asymmetrical power relations in the learning process (Freire 1970). Critical pedagogy strives for emancipation from oppression through the development of a 'critical consciousness' (ibid.).⁸⁹ Morris and Strommel (2014) highlight how open education philosophies and critical pedagogy can converge:

'The pedagogical value in openness is that it can create dialogue, and can deconstruct the teacher-student binary, by increasing access and bringing together at once disparate learning spaces. Openness can function as a form of resistance both within and outside the walls of institutions. But open education is no panacea. Hierarchies must be dismantled – and that dismantling made into part of the process of education – if its potentials are to be realized.'

In deconstructing the teacher-student binary, students are 'promoted to researchers who engage in critical analysis of the forces that shape the world' (Kincheloe 2008:16). However, whether the critical educator needs to relinquish all authority, reducing themselves to peers of the students versus admitting 'that they are in a position of authority and then demonstrate that

⁸⁸ There are three authors referenced in this research with the surname 'Ross'. Ross (2018) refers to Wayne Ross.

⁸⁹ Critical pedagogy will be discussed further in Section 3.2.2

authority in their actions in supports of students’ is subtle difference which is interrogated in the following section (Kincheloe 2008:17).

2.4.5 MOOC Educators

The role of the educator differs in MOOCs as their massiveness limits the ability to personally know and engage with individual students and their work. Educators in both xMOOCs and cMOOCs have thus taken a ‘minimal intervention’ approach (Mackness and Bell 2015:30; Rodriguez 2012). Ross et al. (2014:58) argue that this ‘write[s] the complexity of the teacher out of the MOOC’. They outline three dominant ways in which educator’s involvement in MOOCs are reduced (ibid.). First is ‘the distant “rock star” lecturer’ in xMOOCs who transmits expert content to the masses in static videos. Second is ‘the co-participant or facilitator’ common in cMOOCs where the role of the teacher is reduced to a network node.⁹⁰ The third is when automated processes ‘serve as proxy tutor and assessor’ such as automated quizzes (in xMOOCs) or algorithms and artificial intelligence facilitating personal learning paths or networks. The role of the teacher is deemed subordinate to technology in the digital, connected world (Bayne and Ross 2011). In the implementation of their hybrid MOOC, however, Ross et al. (2014:64) found that despite their efforts to de-centre the role of the teacher, participants desperately wanted to see and engage with ‘an embodied, authoritative’ human teacher. From this we can see that a fine balance is needed between the sage-on-a-stage model and the teacher-as-network-node model.

Moving beyond this reduction, Ross et al (2014:62) argue that ‘MOOC teacher identity’ is ‘not only relevant, but essential, to the success of this new form of education at scale.’ There has been much research already on the impact of educators’ identities in education (Henkel 2000; Keddie 2012; Watson 2009), however MOOC models often overlook these impacts. Drawing on literature of academic and teaching identities, Ross et al. (2014:66) illustrate how academic identity and teaching practices impact the MOOC design process:

‘The lecturer will both feel and project a teaching identity though negotiation of disciplinary, institutional, theoretical, professional, and personal stances. Diminishing or mischaracterising the teacher role could result in lack of appropriate attention to the

⁹⁰ In this scenario, ‘knowledgeable others on the Web’ and students themselves take on the teacher role (Kop 2011:22).

ways in which complex negotiations of people, space, objects, and discourse constitute any educational setting, including MOOCs.’⁹¹

MOOC educators thus play a large role in shaping and framing the MOOC, deciding what is prioritised or omitted, what pedagogies and philosophies it embraces, how participants will interact and how involved they will be in the learning process. Beyond educators, MOOC development is influenced by production team, the instructional designers, and project managers.

2.4.6 MOOC Design

In bringing the above factors together, the process of designing a MOOC is crucial. However, to date, MOOCs have been designed ‘on a fairly ad hoc basis’ (Conole 2015a:247), and there is little literature that clearly articulates MOOC design processes. MOOC designers may make use of Instructional Design (e.g. the ADDIE model – Analysis, Design, Development, Implementation and Evaluation) or Learning Design (e.g. the 7 C’s approach – Conceptualise, Create, Communicate, Collaborate, Consider, Combine, Consolidate) principles to design their MOOCs (Branch 2009; Conole 2015b; Conole and Weller 2008). Table 2-3 identifies key principles from several studies that present clear guidelines and best practices to designing MOOCs.

⁹¹ This connects with Jansen’s (2017:169) sentiments in Section 2.2.5, where he emphasised how teachers interpret the curriculum to students based on their ‘own experiences, backgrounds, politics and preferences’.

Table 2-3 Summary of selected literature on MOOC design

Literature	Principles/ Stages
<p><i>MOOC Design Principles. A Pedagogical Approach from the Learner's Perspective</i> (Guàrdia, Maina, and Sangrà 2013)</p> <p>Analysis: These principles draw on an outcome-based approach to learning, emphasising social constructivism.</p>	<p>The authors outline 10 principles:</p> <ol style="list-style-type: none"> 1. Focus on competence-based outcomes 2. Design through a learner-centred approach 3. Outline a clear plan of milestones and tasks 4. Design for collaborative learning 5. Foster social interaction through social networking 6. Encourage peer assistance 7. Provide quality criteria for knowledge creation 8. Provide opportunities for small group discussions 9. Provide precise criteria for assessment and peer feedback 10. Make appropriate use of media and technology to enhance learning
<p><i>Five Principles for MOOC Design: With a Case Study</i> (Drake, O'Hara, and Seeman 2015)</p> <p>Analysis: These principles draw on an outcome-based approach to learning, emphasising social constructivism.</p>	<p>The authors outline 5 principles:</p> <ol style="list-style-type: none"> 1. Create meaningful, relevant content 2. Encourage cognitive and social engagement 3. Provide tools for students to measure progress 4. Consider accessibility to diverse learners 5. Design with a large scale in mind
<p><i>MOOCs Design and Development: Using Active Learning Pedagogy and Instructional Design Model in MITx Courses on the edX Platform</i> (Kauffman and Kauffman 2015)</p> <p>Analysis: These principles are based on an outcomes-based approach, emphasising constructivist principles.</p>	<p>The authors outline the 5C Model for MOOCs Design:</p> <ol style="list-style-type: none"> 1. <i>Construct</i> intended learning outcomes 2. <i>Consider</i> cognitive prior knowledge and motivational beliefs of learners 3. <i>Create</i> content structure 4. <i>Conceive</i> active learning activities 5. <i>Conduct</i> assessments

<p><i>Designing Effective MOOCs</i> (Conole 2015a)</p> <p>Analysis: The schema is useful in that it does not tie the MOOC designers down to a specific pedagogical approach yet flags major decisions that need to be made on various aspects of MOOC Design. It gives a full breadth of MOOC design possibilities, instead of presenting one philosophical or pedagogical vision.</p>	<p>The author first outlines a 12-dimensional classification schema for MOOCs, and proceeds to discuss it in relation to the 7C's Learning Design Framework. :</p> <ol style="list-style-type: none"> 1. Open – the extent to which the MOOC is open 2. Massive – the size of the MOOC in terms of number of participants 3. Diverse – the diversity of the participant population 4. Multimedia – the type of multimedia to be used 5. Communication – the extent and ways in which communication is encouraged between participants 6. Collaboration – the extent and ways in which collaboration is encouraged between participants 7. Reflections – the extent to which reflection is encouraged by participants 8. Learning pathways – the choice of usage of learning pathways or Personal Learning Environments (PLE) 9. Quality assurance – the degree to which the MOOC has undergone a quality assurance process 10. Certification – whether the MOOC will offer certification and in what form 11. Formal – whether the MOOC will be linked to a formal educational offering 12. Autonomy – the extent to which the participants are expected to work independently or be guided through their learning process
<p><i>A roadmap for offering MOOC from an LMIC institution</i> (Abidi et al. 2017)</p> <p>Analysis: These principles centre the needs of participants from Low- and Middle-Income Countries (LMICs) and thus focus on factors <i>surrounding</i> MOOC design beyond pedagogy</p>	<p>The authors highlight 3 factors at the planning level:</p> <ol style="list-style-type: none"> 1. Re-align teaching philosophy to cater to global, diverse audience. 2. Quality control the course through double-checking it with various groups <i>before</i> implementation 3. Consider needs of a diverse audience 4. Provide guidance and learner support throughout the course 5. Design for technological accessibility for people from LMICs 6. Publicise the MOOC in a variety of ways to ensure it reaches prospective participants

Source: Author's own

While all the papers mentioned MOOC participant diversity to some extent, Abidi et al (2017) was the only paper that placed concerted emphasis on environmental and contextual factors *surrounding* MOOC creation as it focused on design in LMICs. The rest focused on what happens *in* the MOOC. Other useful papers that discussed contextual factors, although not as a MOOC design framework, include Bali's (2014) 'Gleaning good practice from existing MOOCs', and Lackner et al.'s (2014) 'How to MOOC? – A pedagogical guideline for practitioners'.

2.5 Critiques of the OEM and MOOCs

This section outlines three critiques regarding the OEM and MOOCs that are relevant to this research, namely, that they can be co-opted for neoliberal agendas, that they can contribute to injustice, and that they can promote neocolonialism.⁹²

2.5.1 The Neoliberal Critique

Wiley (2011b) and Watters (2014) raise the concern of 'open-washing', where companies or organisations use the term 'open' to portray themselves as part of the open movement, but still use propriety practices or freemium models. Weller (2014) similarly argues that while the 'battle for open has been won' (i.e. the open movement has now become mainstream), 'open' now has market value and there exists new challenges in directing the movement forward. Open is being reinterpreted as simply 'free' and 'online' without the associated reuse rights (ibid.). Moreover, it is being used for commercial interests and branding (ibid.).

Commercial MOOC platforms, for example, offer free-to-access courses by removing the human support cost factor (i.e. unbundling content from teacher support). These models, however, can exploit academic labour and promote neoliberalism in education (Adam 2019; Hall 2013; Weller 2014). While MOOC platforms may have had egalitarian ideals in earlier iterations that sought to remove cost and access barriers to education, challenge conventional accreditation as signallers of competence, and promote life-long learning, 2018 saw the 'Year of MOOC-based Degrees' (Shah 2019b). MOOC platforms, including edX, moved to their next phase of monetisation, after having built up a considerable market share and brand (Reich and Ruipérez-Valiente 2019:131).

⁹² Where necessary, I specify if the critique is aimed at the OEM or at MOOCs, else I use the term 'open' to refer generally to both.

Within this co-optation of the open movement, it is important to understand the Silicon Valley narrative (myth) of ‘disruptive innovation’, where technology is the saviour to, in this case, the broken education system (Watters 2013; Weller 2014).⁹³ This narrative serves as an ideological justification for neoliberal techno-capitalism, where broader forces (e.g. policy makers and industry interests) seek to neoliberalise higher education (Weller 2014:158). Weller (2014:123) argues that the narrative rhetorically claims that ‘the incumbents cannot be trusted and that external agents are required to make sweeping changes.’. Underpinned by the Silicon Valley narrative, MOOC platforms rose to fame, above other initiatives in open education,⁹⁴ as the technological disruptive innovator to save higher education (ibid.). Student protests against high tuition fees in countries like South Africa, Nigeria and Sierra Leone, were also co-opted into the Silicon Valley education-is-broken narrative, with suggestions on how MOOCs could save African education systems (Mourdoukoutas 2017), instead of fixing problems in the education system caused by neoliberalism.⁹⁵ Lockley (2018:146) asks, ‘Is what we are seeing with ‘open’ as access *success-in-failure* and *sanctioned ignorance*? Are these terms synonymous with pedagogic concepts like *interest-convergence* and Illich’s *fake public goods*?’ Thomson’s (2001:142) point that ‘we have come to instrumentalize, professionalize, vocationize, corporatize, and ultimately technologize education’ is now more than ever evident in MOOC platforms.

2.5.2 The Social Injustice Critique

Beyond the critique of current manifestations of openness not being what was intended in the original conceptualisation, there is further critique that the original conceptualisation of openness itself is inadequate (Watters 2014; Winn 2012). While open education was founded on ‘altruism and the belief that education is a public good.’ (UNESCO 2002; Weller 2014:2), openness is often reduced to Wiley’s (2016) shorthand definition of ‘open = free access + open licensing’; if these base requirements are met, something can be deemed open. Thus, much emphasis has been put on legal freedoms but not enough on justice and equity. Watters (2014) argues that ‘open’ is not politically neutral nor ideologically free; it is not synonymous to equality or justice. In a systematic literature review on conceptions of open education, Lambert

⁹³ The rising costs of education is claimed to be the main reason for which it is claimed that education is broken. This is ironic as costs have risen due to a decrease in public funds for education, as neoliberal policies increase.

⁹⁴ Other initiatives in the OEM did not match the neoliberal Silicon Valley narrative in the way MOOCs did (Weller 2014).

⁹⁵ After independence was achieved, many structural adjustment programs from the World bank and IMF influenced the policies of developing countries. Structural adjustment programs and neoliberal policies led to many African universities increasing their tuition fees (Federici, Caffentzis, and Alidou 2000; Mamdani 2016)

(2018) highlights that while the UNESCO (2002) definition of OER centred social justice, the social justice aims became hidden or absent in subsequent years of literature. It was instead replaced by what she calls ‘openness determinism’ where openness is ‘fetishized as if it had some kind of inherent power’ and becomes an end in itself (Lambert 2018:229). Bayne et al. (2015:247) similarly state that ‘it is precisely this view of openness – a virtue of natural worth – that is problematic.’

While this may seem to simply be a definitional issue, lack of an explicit concern for justice⁹⁶ means that ‘openness’ in education can be achieved whilst educational inequalities remain unaddressed (Lambert 2018:226). Open access does not imply equitable access. In striving for a new vision, Lambert (2018:239) provides the following justice-oriented definition for open education:

‘Open Education is the development of free digitally enabled learning materials and experiences primarily by and for the benefit and empowerment of non-privileged learners who may be under-represented in education systems or marginalised in their global context. Success of social justice aligned programs can be measured not by any particular technical feature or format, but instead by the extent to which they enact redistributive justice, recognitive justice and/or representational justice.’⁹⁷

Alongside justice is the issue of ethics, Liyanagunawardena et al. (2013) reported little reference to ethical considerations in research literature on MOOCs. MOOCs have become a testing ground for pedagogical experimentation in digital learning (Lane, Caird, and Weller 2014), for example the use of adaptive learning paths.⁹⁸ Student data privacy in MOOCs is also a concern as students must accept certain user agreements to be able to access the MOOC platforms (Khalil, Prinsloo, and Slade 2018). Little attention is paid to how MOOC platforms collect, analyse and use data (Czerniewicz 2018), as well as the role that third party data brokers play (Prinsloo, Slade, and Khalil 2019).

⁹⁶ There are various, contesting definitions of ‘justice’; these are unpacked at length in Section 3.4.

⁹⁷ The concepts of redistributive justice, recognitive justice and/or representational justice are unpacked in Section 3.4.

⁹⁸ While learning analytics can be well-intentioned, different learners receiving different levels/qualities of education based on algorithms may promote inequality. Furthermore, students may not be fully aware that they are receiving a different ‘learning path’ to others.

2.5.3 The Neocolonial Critique

Neocolonial critiques of OEM/MOOCs resemble social injustice critiques with a specific emphasis on cultural-epistemic and geopolitical inequalities between former colonisers and ex-colonies (Adam 2019).

The first neocolonial critique challenges the notion that openness is inherently *and universally* good. Lockley (2018) highlights that the tenets of ‘openness’ are defined in and for Western contexts, and should not be thought of as an absolute requirement in differing contexts, especially given global inequities in power and privilege. Western conceptions of justice⁹⁹ centre around debates concerning liberty and property rights, which is not always of central concern in alternative conceptions of justice (Lockley 2018).¹⁰⁰ In open educational programmes in developing country contexts, for example, the ‘legal status of the learning materials (copyright or openly licenced) was of little consequence so long as it was free to the end user’; of greater concern to educators was the ability to support disadvantaged learners (Arinto, Hodgkinson-Williams, and Trotter 2017; Lambert 2019:1).

The second neocolonial critique is that the ‘skewed geo-politics of knowledge’ is ‘ironically worsened in an open education landscape’ (Czerniewicz 2018:1). As Piron et al. (2017:abstract) argue,

‘... a conception of open access that is limited to the legal and technical questions of the accessibility of science without thinking about the relationship between center and periphery can become a source of epistemic alienation and neocolonialism in the South.’

Reinforcing a core-to-periphery model, Global South education systems are flooded with free open content from the Global North, stifling attempts by local providers to create local content (Czerniewicz 2018; Lockley 2018). This is seen through the emphasis on ‘adoption’ and ‘awareness’ of OER in developing countries which do not do much to address cognitive injustices (Hodgkinson-Williams et al. 2017:57; Lambert 2018:231). For example, the emphasis on ‘localising and distributing OER at scale’ in developing countries, as outlined in *Cape Town Open Education Declaration 10th Anniversary: Ten directions to move Open Education forward* (CPT+10 2017), assumes that ‘translating and adapting STEM OER to fit

⁹⁹ Western conception of justice are unpacked in Section 3.4.1.

¹⁰⁰ Lockley provides the example of Korea, where copyright was an extremely foreign concept as copying was a sincere form of flattery and that would gladden the authors. Lee (2001:1121) describes that Koreans viewed intellectual creations as public good to be shared.

local needs' is sufficient without considering the Western-centric epistemologies embedded in the content. Even when content is translated to other languages, 'the methodological and intellectual orientations of the English-speaking academic culture' remain (Altbach 2014:6). The dominance of English in OER and MOOCs may 'inhibit the emergence of a local academic culture, local academic content, and courses tailored specially for national audiences' (Altbach 2014:6). Open education can thus stifle knowledge production in the Global South 'by reinforcing the cognitive injustices that prevent African researchers from fully deploying their research capacities in the service of the community and sustainable local development of their country.' (Piron 2017). Rather than funding being given to Global North institutes to promote OER adoption and re-use in the Global South, this funding could go directly to the South to *create* local content and implement programmes in ways that best suits them.

A third neocolonial critique of OEM and MOOCs is to challenge the assumed superiority of Western knowledges and epistemologies. In colonial expansion across the world, knowledge was legitimatised through a European interpretation of it rather than through its own narrative (Said 1978; Thiong'o 2005). Bali and Sharma (2017:26) argue that 'both xMOOCs and cMOOCs tend to perpetuate and privilege dominant, colonial perspectives and marginalise alternatives from the global south'. MOOCs from elite universities portray that their knowledge is superior to knowledge from other places. This can be seen in the promotional materials of edX and Coursera which advertise a 'world class education' from the 'best professors' at 'top universities'.¹⁰¹ As Portmess (2013, 3) observes, 'such language with its implicit condescension toward non-affiliated institutions in the U.S. or abroad encourages Udacians, edXers and Courserians, to enrol not only in online, branded courses but to be co-opted by the interests of powerful institutions in their own educational positioning'. Such models are designed to 'favour the mainstream, the traditional, and the already privileged' (Bali and Sharma 2017, 26). Open knowledge thus 'redoubles' the 'epistemic alienation' through reinforcing the use of Western knowledge as 'normative models, to the detriment of local epistemologies' (Piron et al. 2017).¹⁰²

¹⁰¹ University ranking systems define educational excellence according to elite U.S. contexts (O'Neil 2016), neglecting cultural, socio-political or infrastructural contexts in other regions.

¹⁰² This article, and its English translation can be found at <https://journals.openedition.org/rfsic/3292#text>. The quoted text is in paragraph 44. As it is an online article, there are no page numbers.

2.6 Conclusion

The first half of this chapter gave an overview of the history of colonisation and apartheid in South Africa and how these legacies still impact the lives of South Africans today, particularly through the highly unequal education system. Post-1994, neoliberal policies have worsened inequality in access to education. In 2015 and 2016, student protests for free, decolonised education shook the country, causing universities to reflect on their alienating and exclusionary institutional culture and structure.

The second half of this chapter focused on global developments in education through the impact of digital technology and the internet. The evolution of the OEM and MOOCs were reviewed, highlighting various challenges to engaging with these movements from the Global South. This section also reviewed current trends and debates in MOOCs, highlighting themes of access, diversity, pedagogy, participation, MOOC designers' roles, and MOOC design principles. Lastly, three critiques of OEM/MOOCs were given, namely, the neoliberal critique, the social injustice critique and the neocolonial critique. These three critiques form the basis of arguments throughout the rest of this thesis, where more justice-oriented approaches to MOOC design is investigated.

3 Conceptual and Analytical Framework

3.1 Introduction

This chapter outlines the conceptual and analytical framework used in this thesis. The bodies of knowledge that I draw upon seek to uncover historical and present-day systems of oppression in general life, and more specifically in education and globalised online education. As the *sources* of these injustices are focused upon, rather than their manifestations, the selected bodies of knowledge were chosen due to their ability to help *analyse* injustices.¹⁰³

Five main bodies of knowledge are drawn upon to form the conceptual framework: embodied cognition and critical pedagogy in Section 3.2, the capability approach in Section 3.3, social justice theories in Section 3.4, and decolonial thought in Section 3.5. This can be seen in Figure 3-1.

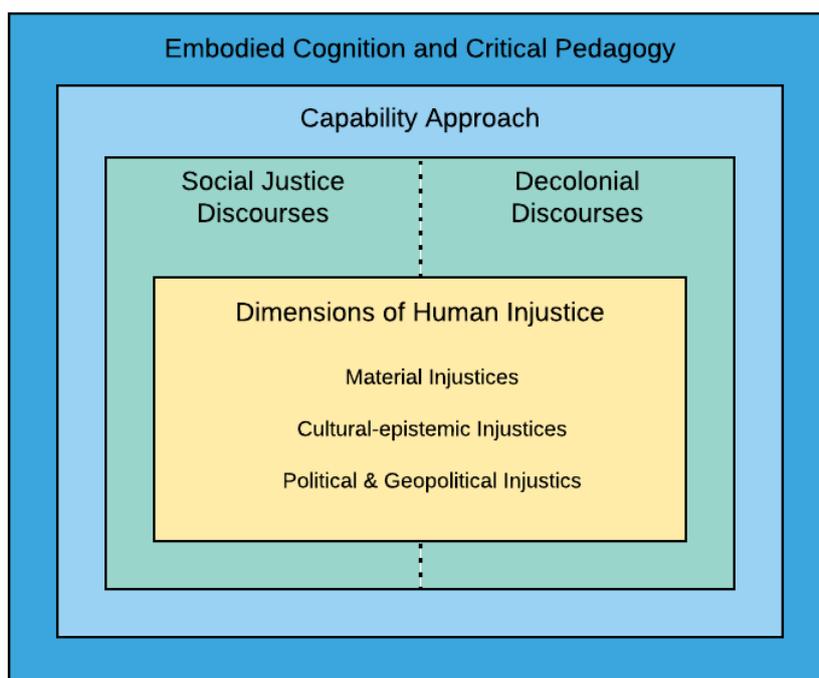


Figure 3-1 Summary of conceptual framework

Source: Author's own

The chapter first sets out to unpack the philosophical underpinnings taken in this research, which is drawn on from embodied cognition theory. Embodied cognition takes an *epistemological* stance that knowledge is shaped by our biological, environmental, contextual

¹⁰³ This is in contrast with specific discourses on race, gender, culture, etc of which there are many.

and historical factors, whilst at the same time taking a realist *ontological* position, which contends that a pre-given world exists. Thus, our situated knowledge shapes our journey in discovering this reality. Critical pedagogy, which emphasises the politics of knowledge production, is coupled with embodied cognition, and together they serve to unpack injustices which marginalise certain ways-of-being and ways-of-knowing.¹⁰⁴

After establishing the broad philosophical contours of the conceptual framework, the capability approach adds further theoretical underpinnings from the view of moral and political philosophy. In line with embodied cognition's stance on situatedness, the capability approach serves to evaluate wellbeing through the stance that individuals and communities *define for themselves* what they have reason to value, rather than having universal standards dictate what a good life is.¹⁰⁵

Following this, conceptualisations of (in)justice are unpacked through social justice and decolonial discourses. Whilst social justice and decolonial theories have overlapping themes, I argue that they have largely been regarded as separate discourses because of the different intellectual histories and foundations of these discourses. Broad-ranging (often contesting) contemporary¹⁰⁶ social justice frameworks and theories (that are often applied universally, e.g. through human rights frameworks) are from the Global North, particularly the USA, and are rooted in the histories and contexts of Global North discourses on justice (Kant 1785; Mill 1863; Nielsen 1979; Nozick 1974; Nussbaum 2002; Rawls 1971; Sandel 1998; Sunstein 1999). These discourses are sometimes not the most relevant to the contexts of the Global South. However, more recent *global* justice frameworks from the Global North have emerged that emphasise geopolitical inequalities and issues of recognition and representation from marginalised peoples globally (Fraser 2005; Miller 1999; Pogge 1994; I. Young 1990).

Decolonial discourses, on the other hand, have evolved *from* Global South scholars who aim to dismantle global power imbalances, including injustices in terms of whose and what knowledges count (Connell 2014; Grosfoguel 2011; Ndlovu-Gatsheni 2013; Nyamnjoh 2012;

¹⁰⁴ 'ways-of-being' refers to an ontological emphasis on ways of life/living and on cumulative cultural history. 'ways-of-knowing' refers to an epistemological emphasis on what counts as knowledge; it is strongly tied to one's way-of-being.

¹⁰⁵ The capability approach strongly influenced the research methods of this study. This is discussed in Chapter 4.

¹⁰⁶ It is crucial to note that many religions presented social justice frameworks across time, but this paper focuses on the contemporary and dominant theories that shape how social justice is implemented today.

Santos 2014; Thiong'o 1986). Decolonial theories were born in contestation with the universalisation of Euro-centric frameworks of human values.¹⁰⁷

Through drawing on recent global justice theory from the Global North, and the decolonial thought from the Global South, Section 3.6 shows how these bodies of knowledge begin to converge. Through this convergence, I construct the analytical framework for this thesis; the 'Dimensions of Human Injustice' (DoHI) Framework. This framework leverages the strength of both Global North and Global South theories on justice to build a more robust and holistic approach. The DoHI highlights three intersecting and reinforcing dimensions of injustice: material, cultural-epistemic and political/geopolitical injustices.

3.2 Embodiment Cognition

3.2.1 Embodied Cognition in Continental Philosophy and Cognitive Sciences

The term 'embodiment' loosely describes the connection between the mind, the body and the world (Leigh 2019). Embodied cognition theorists differ from classic accounts of cognition that focus predominantly on internal cognitive processes which overlook environmental factors. Varela et al. (1992:173) highlight two main facets of the term embodied cognition:

'first, that cognition depends upon the kinds of experience that come from having a body with various sensorimotor capacities, and second, that these individual sensorimotor capacities are themselves embedded in a more encompassing biological, psychological, and cultural context.'

Whilst useful work on embodiment in education deals with the first kinaesthetic angle of embodiment (Leigh 2019),¹⁰⁸ this conceptual framework focuses on the second aspect in terms of the biological, psychological and cultural contexts that influence cognition, learning and knowledge production due to its ability to help analyse epistemic injustices.

Embodied cognition aims 'to expose the inadequacies of the objectivist philosophical tradition in its rigid separation of the mind from the body, cognition from emotion, and reason from imagination' (Johnson 1987:abstract). Rather, the body and its sensorimotor capacities are inextricably linked with memory, emotion, language, and life experiences (ibid.). On the one hand, there is the 'inward' empirical scientific notion of *a pre-given world* that is understood

¹⁰⁷ For example, whilst Wronka (2016), in alignment with the United Nation's (2006) articulation of social justice, argues that *human rights is the bedrock of social justice* principles, decolonial discourses *seek to decolonise such human rights* frameworks (Barreto 2018; Maldonado-Torres 2017; Zembylas 2017).

¹⁰⁸ For example, learning through dance, movement, sports therapy, or ventriloquism.

and recovered through one's senses (Varela et al. 1992:173). On the other, there is the 'outward' social constructivist notion whereby the perceiver's mind *constructs and projects the world* (ibid.). Embodied cognition aims to find a middle way between these two positions, a 'mutual specification', whereby the world and the perceiver specify each other and evolve together (ibid.).

Varela et al. (1992:149) argue that 'knowledge depends on being in a world that is inseparable from our bodies, our language, and our social history – in short, from our embodiment'. Johnson (1987:14) emphasises this role of the social sphere:

'Our community helps us interpret and codify many of our felt patterns. They become shared cultural modes of experience and help to determine the nature of our meaningful, coherent understanding of our "world".'

This is not only in the present, but due to a *cumulative* cultural evolution (Tomasello 1999), whereby the 'environment in which the human mind develops has a history itself; and this history owes its form to the activities of human beings, which are in turn conditioned by the development of mind' (Derry 2008:506). McDowell (1996:126) describes this as 'second nature', highlighting that human beings develop their cognitive capacities through initiation into language and tradition which stores 'historically accumulated wisdom about what is a reason for what.' McDowell (1996:126) further argues that it is 'a standing obligation' for inheritors of a tradition 'to engage in critical reflection' as 'part of the inheritance'.

3.2.2 Embodiment and Critical Pedagogy

While embodied cognition theorists strongly emphasise the role of the environment, the body and culture, it is often spoken of apolitically. Drawing on Freire (1970), critical pedagogy brings together the concepts of embodied cognition, with the recognition of imbalances in social orders, to set out a praxis that uses these concepts to strive for social change. This pedagogy involves constantly developing a 'critical consciousness' which is 'learning to perceive social, political, and economic contradictions, and to take action against the oppressive elements of reality' (Freire 1970:17).

An important aspect of critical pedagogy is 'critical reflexivity' which 'recognises the embodied nature of the practitioner's response to the world' (Door 2014:88). Door argues that educational practice cannot be separated from the 'essential nature of the practitioner' thus continuous reflexive critique is needed by the practitioner of the interrelatedness of the self and

the world (ibid.). Through this, one is able to change one's practice through 'conscientisation' with the aim of 'mutual humanization' (Freire 1970). Critical reflexivity requires practitioners to critique the socio-cultural world and its external impositions on us, as well as critique ourselves. This requires critique of our embodied transactions (Door 2014).

Door (2014:90) highlights that both our thoughts and actions can be 'habitual and embodied' such that 'the way we really think is revealed in our actions'. Through critical pedagogy, Freire (1970) argue that when one takes a conscious stance to investigate one's positionality in the world in relation to others, a process of 'mutual humanisation' takes place, where those on both oppressor and oppressed are transformed. While we are initiated into the world through enculturation of a second nature, these views can be critiqued and changed when we reach a state of critical consciousness.

3.3 Capability Approach

The capability approach (CA), from the view of moral and political philosophy,¹⁰⁹ is a theoretical framework about wellbeing, agency and justice (Oosterlaken 2015; Robeyns 2016; Sen 1985b).¹¹⁰ Sen (1983, 1985a) developed the basis of the CA from his critique of other approaches to human development such as utilitarianism, libertarianism and resourcism which he viewed as narrowly focused on the wrong leverage points, e.g. utility, liberty or distribution of primary goods.

Capability here represents 'a person's *freedom to achieve well-being*' (Sen 1987:49 original italics), where one has the possibility 'to lead the kind of life he or she has reason to value' (Sen 1999:87). This links to embodied cognition in that it emphasises the role of context, situatedness and 'information pluralism' where the aim is to 'reflect on people's views and evaluations on their own living' (Hirai 2017:123–24; Sen 1985b). Sen's (1992, 2009) conscious intention was to create an open-ended and flexible approach incorporating diverse concerns and dimensions, as opposed to a normative theory that defines how things ought to be to have a good-quality life (Robeyns 2005). While happiness and subjectivity are part of the capability approach, 'Sen does not accept all individual evaluations' unquestioningly¹¹¹ and highlights 'the significance of public reasoning' (Hirai 2017:125), thus following a similar

¹⁰⁹ The capability approach can also be viewed from the perspective of social sciences or welfare economics, however, in forming a conceptual framework, the philosophical point of view is most relevant.

¹¹⁰ Robeyn (2016) highlights the three core principles as wellbeing, development and justice; however in this dissertation, agency more accurately describes how the capability approach is used.

¹¹¹ Nussbaum (2000) more clearly notes that some capabilities are undesirable to promote such as capability for cruelty. The CA is interested in capabilities that are intrinsically valuable.

stance as embodied cognition theorists concept of ‘mutual specification’ (Varela et al. 1992:173).¹¹² Sen takes note of adaptive preferences, where one’s preferences adapt to include oppressive elements of society, arguing that careful ethical evaluation of preferences is needed (Oosterlaken 2015:5).¹¹³ He, however, cautions against labelling people’s preferences as ‘adaptive’ too easily as they may have ‘different yet legitimate ideas about what a good life is’ and the CA holds agency in high regard (Oosterlaken 2015:5).

CA differs from other poverty frameworks as it distinguishes between ‘means to achieve’ (*inputs or resources*), ‘freedom to achieve’ (*capabilities*) and ‘actual achievement’ (*functionings*) (Sen 1993). Inputs become capabilities by going through *conversion factors* which influence the level to which capabilities can be generated. Three sets of conversion factors are identified: individual (e.g. literacy, gender, and disability), social (e.g. social norms, religion, and gender roles), and environmental characteristics (e.g. infrastructure, public goods, and politics) (Sen 1981; Zheng 2009).¹¹⁴

Capabilities can be converted to functionings depending on the individual’s¹¹⁵ *choice and agency* (Haenssger and Ariana 2017).¹¹⁶ The CA also acknowledges that people pursue not only their own wellbeing, but may want to promote ‘the wellbeing of others or liv[e] up to religious ideals’ (Oosterlaken 2015:6).¹¹⁷

3.3.1 The Capability Approach and Education

Vast scholarship exists regarding the application of the CA to education (Clark 2016; Nussbaum 2006; Walker 2005; Walker and Unterhalter 2007). Although Sen steered away from generating a definitive list of capabilities, he does cite some ‘intrinsically valuable’ capabilities in terms of education, such as being able to ‘read, write, count and communicate’ (Sen 1984:497), ‘being acceptably well-informed’ (Sen 1985b:199), and ‘being able to take

¹¹² This similarity arises due to the fact that while embodied cognition theory and the capability approach acknowledge that the multiple perspectives exist, a *purely* subjective stance is not taken. Instead, they both argue that these multiple perspectives are not always *equally* valid, nor should they be accepted unquestioningly.

¹¹³ In a utilitarian approach, one’s happiness in a state of, for example, malnutrition, would indicate that there is no moral need for initiatives to reduce poverty (Oosterlaken 2015:5).

¹¹⁴ In Section 3.3.2, a fourth conversion factor of socio-technological factors is discussed.

¹¹⁵ While the CA has been highly influential in Human Development Approach used by the United Nations Development Programme (Hirai 2017), it has been critiqued for its highly individualist approach. However further works by Evans (2002), Ibrahim (2006) and others, on *collective* capabilities have sought to address this.

¹¹⁶ For example, a person who is fasting may have the same functioning as a person starving due to lack of food, however the former has the capability and resources to eat whereas the latter does not (Robeyns 2016; Sen 1992:52).

¹¹⁷ Emphasising agency, Sen (1999, p. 281) sees the income-poor as ‘active participant(s) in change’, rather than ‘passive and docile recipients of instruction or of dispensed assistance’.

part in literary and scientific pursuits’ (Sen 1984:497) (Clark 2016). Additionally, Sen (1999) notes how inextricably linked education is with other capabilities such as social and political forms of participation, women’s agency, fertility and health (Clark 2016). Similarly, of Nussbaum’s (2011) list of ten central capabilities, two of them relate strongly to education; ‘sense, imagination and thought’ and ‘practical reason’ (Clark 2016). Capability lists regarding education are unpacked further in Section 4.3.5 on survey design as these lists influenced the design of surveys.

3.3.2 The Capability Approach and Technology

The impacts of technologies on capabilities are not clear cut: they could have unexpected positive or negative effects on capabilities; they could expand the capabilities of one group but reduce the capabilities of another (thereby increasing inequality);¹¹⁸ or expand one capability of an individual but reduce other capabilities for that individual (Oosterlaken 2015:9).¹¹⁹

Technology is embedded in various aspects of the CA as inputs, conversion factors, and choices of agency. For example, having a mobile phone is a resource, yet having quality internet connection could be the conversion factor (Haenssger and Ariana 2017). Johnstone (2012) adds that a socio-technological environment impacts one’s capabilities,¹²⁰ thus highlighting the need for a class of *socio-technological conversion factors* in addition to the original three conversion factors. Haenssger and Ariana (2017) further assert that technology has a *transformative* dimension that influences and modifies the characteristics of other inputs. These transformative properties are dependent on the socio-technological context, thus these technological objects are different from any ordinary inputs ‘because they are used on behalf

¹¹⁸ If some of the population have certain capabilities and that influence the norms of that society, it actually further disadvantages those to whom this capability is constrained. For example, if online advertisement of jobs is the new norm, those who have access to the internet in the community have the ability to apply for the job. Those that do not have internet are further disadvantaged as their ability to gain employment is reduced. A similar analogy could be made for how the technological changes impact important capabilities such as affiliation, healthcare, political participation, and many others.

¹¹⁹ Similarly, education is often seen as something unquestionably good but, as was outlined in Section 2.2 through various examples of how education was used to suppress and subjugate people, education can also have serious negative consequences. Unterhalter et al. (2007) similarly outline the negative consequences of harassment in an unsafe school environments. Therefore technology, like education, can diminish as well as enhance other capabilities.

¹²⁰ For example, a clock, a car and now arguably a mobile phone, have become so embedded into our social structure and norms that they inform how we think, act and behave (Haenssger and Ariana 2017). Another example is if a workshop was advertised through Facebook, and one could not connect (conversion factor) to Facebook, then one’s capability for social inclusion is reduced. This emphasizes the importance of the socio-technological context.

or as extensions of the human body in the translation of other inputs’ characteristics into valued capabilities’ (Haenssger and Ariana 2017:6).

Figure 3-2 below graphically demonstrates this inclusion of technology in the CA framework.

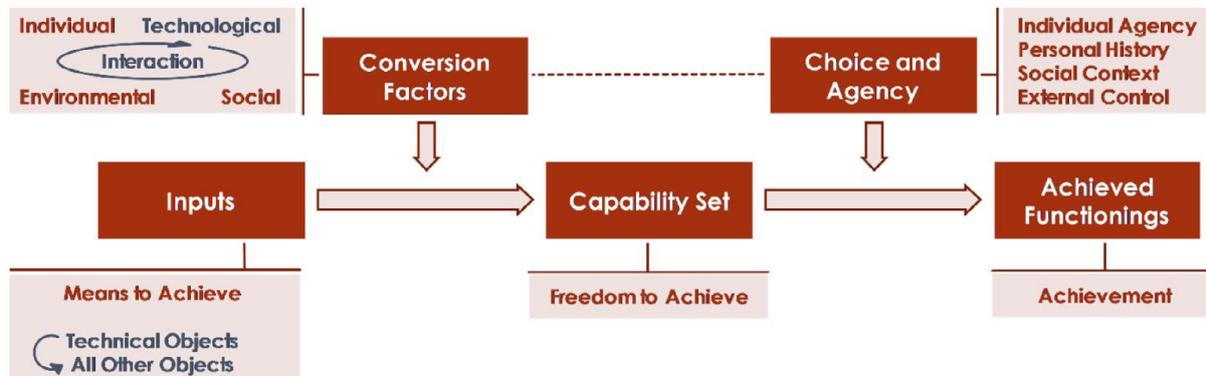


Figure 3-2 Technology-augmented capability approach

Source: Haenssger and Ariana (2017)

For those who have access to technology, it can allow them to flourish in new and important ways. Coeckelbergh (2011) terms this flourishing as the difference between ‘human development’ (minimum requirements to achieve human dignity) and ‘human enhancement’ (the maximum for human flourishing in which the best life achievable is possible). He argues that technology is an extension of the mind, an extension of the memory, and consequently an extension of the capabilities to achieve human flourishing (ibid.). In juxtaposition, those who do not have access to certain technologies have limited capabilities. Furthermore, those that have extended ‘technological capabilities’, raise the bar of what basic capabilities are needed in order to meet the threshold of a minimally decent life. Thus, the basic capability to satisfy ‘elementary and crucially important functionings’ (Sen 1992:45), change as some within a community, or between communities (or countries) technologically advance. By example, Zheng and Walsham (2008) extend Sen’s (2000) work on social exclusion, viewing exclusion in e-society as being a form of capability deprivation, and thus framing the digital divide as the ‘deprivation of capabilities that are essential in an e-society’ (Zheng 2009). Looking at capabilities through a non-technological lens may hide what new basic capabilities are needed as societal functioning’s change with the introduction of new technologies.

The CA has discussed evaluating wellbeing and quality of life; however, the intention of this conceptual framework is to go further to build a conceptualisation of (in)justice. Alexander (2016:1) argues that a theory of wellbeing cannot be tantamount to a theory of justice as some judgements need to be made in order to achieve the latter. This is where Nussbaum’s (2009,

2011) work departs from that of Sen's in that it seeks to normatively theorise which capabilities are valuable through a (partial) capability theory of justice. Furthermore, Platzky Miller (2018:145) argues that capability discussions seldom account for historical injustices and that '[t]hose wishing to use these frameworks and tools must therefore incorporate sensitivity to historical legacies, particularly the ways in which historical injustices manifest today.' The following sections thus review conceptualisations of justice, paying attention to their roots in light of historical injustices.

3.4 Social Justice

In this section, I argue that while Western theories of justice are designed from and for their contexts (Section 3.4.1), some recent theories of social justice have begun to take a global approach to justice (Section 3.4.2), acknowledging geopolitical inequalities and focusing on human dignity for all rather than those with a particular citizenship. Thus, despite different intellectual and geographical histories, these global justice theories from the Global North are beginning to converge with issues that decolonial scholars from the Global South have raised for decades. Additionally, these theories of global social justice have been applied in South Africa, resulting in a growing pool of locally-grounded social justice literature (Section 3.4.3). I demonstrate that post-2015, the South African social justice literature takes a further decolonial turn.

3.4.1 Western Theories of Justice

The dominant understandings of social justice accepted globally today are developed from debates and discourses from the Global North, promoted through global institutions like the United Nations. While there are many contesting conceptualisations of justice within Western discourses, they draw on a similar intellectual history which *sets the framing* of the debates. Additionally, they are developed from their own evolving worldviews and contexts. This is true for all theories rooted in particular regions, contexts and frames, but it is dominant Western theories of justice that are often applied universally and it is Western theories of justice that have often overlooked (or justified) global injustices such as slavery or colonialism.

Key philosophers in Western theories of justice include Plato and Aristotle from Ancient Greece, Augustine and Aquinas from medieval Christianity, Hobbes and Hume from early modernity, Kant and Mill from the later modern period, and Rawls in more contemporary times (Pomerleau 2019). Four main schools of thought can be said to have emerged from debates between these Western scholars (as well as others) on justice: Utilitarianism (Bentham 1789;

Mill 1863), Libertarianism (Nozick 1974), Kantianism (Kant 1785; Rawls 1971), and Aristotelianism (along with neo-Aristotelianism (Nussbaum 2002; Sandel 1998)).¹²¹

The work of Rawls, an American philosopher, is expanded on as his work is a precursor to social justice theories used in to build the analytical framework. Rawls (1971) opposed utilitarianism and revived a Kantian version of social contract theory with his theory of ‘justice as fairness’. He conceptualised ‘the veil of ignorance’ where one should conceptualise a society where one’s own gender, race, ethnic identity, level of intelligence, physical strength, quickness, stamina, etc. is unknown. With this approach, Rawls argues two basic principles: ‘equality in the assignment of basic rights and duties’ and that ‘social and economic inequalities, for example inequalities of wealth and authority, are just only if they result in compensating benefits for everyone, and in particular for the least advantaged members of society’¹²² (Pomerleau 2019).¹²³

Rawls’s work has been extremely influential on conceptions of justice in the US and other English-speaking countries (Pomerleau 2019). A few contemporary scholars have challenged his work, offering alternatives. Nozick (1974), a libertarian, was opposed to the compromise of individual liberty for the sake of socio-economic equality and promoted as little regulation as possible.¹²⁴ Nielsen (1979), a socialist, was opposed to both Rawls and Nozick and considered equality to be of greater importance than individual liberty. Sandel (2010),¹²⁵ a communitarian, argues that the wellbeing of community takes precedence over individual liberty, and views that Rawls does not place enough emphasis on community and community values.¹²⁶ Pogge (1994) takes a globalist stance on justice, extending Rawls egalitarian view on justice, that seemed to only work intranationally, to making it more globally applicable.¹²⁷

As we can see, Western thought cannot be homogenised into one point of view. However, all these theories build upon and interact with each other and the norms and values of the evolving

¹²¹ These schools of thought were outlined by Sandel (2010)

¹²² To elaborate on the latter, a president or person in office may have more authority and wealth and this would ideally be in the best interest of the nation.

¹²³ As highlighted by Pomerleau (2019), what Rawls does not acknowledge in his ‘veil of ignorance’ experiment is the inequality between societies and that ‘justice requires a massive redistribution of wealth from richer to poorer societies’.

¹²⁴ Nozick was a colleague of Rawls. He viewed the redistribution of wealth (such as through tax) as unjust, if one has justly acquired it.

¹²⁵ An interesting side note is that Sandel has a popular MOOC on edX called Justice. It is highly engaging, following a Socratic Method of teaching which differs from conventional xMOOCs.

¹²⁶ Sandel (1998) argues that community has a great influence on personal identity and values.

¹²⁷ Pogge (1994) proposes a global egalitarian principal of distributive justice, that would help the world’s poorest people, proposing a tax for extracting resources.

contexts, *setting the frame* of the discussion. For example, the emphasis of justice in relation to property rights, individual's rights, or liberty, may not be of central concern in conceptualisations of justice in non-Western societies.¹²⁸

3.4.2 Global Social Justice

In line with all the 'turns' that are currently said to be happening in our fast-changing world (Mbembe 2019),¹²⁹ there is a much greater recognition for voices from the (global) margins, and this is represented well in the global justice framework of Nancy Fraser which is drawn on to build the DoHI Framework in Section 3.6.

Building upon Rawls, Fraser (1999, 2005), an American critical theorist and feminist, has produced a comprehensive framework that responds to contemporary problems of globalisation and identity politics in relation to justice. She highlights that we can no longer look at justice in a territorial way considering transnational corporations, international currency, international NGOs, mass media and the internet, among other global forces. She discusses concepts of distributive justice and recognitive justice¹³⁰ in her earlier works (Fraser 1995, 2002; Fraser and Honneth 2003), and then brings in representative justice into her later works (Fraser 2005). The key concept in Fraser's work on justice is 'participatory parity' which views social justice as that which is required to make possible that all participants are on an equal footing in social life (Bozalek 2014; Fraser 2005).¹³¹ Lambert (2018:227) summarises Fraser's three dimensions of social justice:

'Redistributive justice is the most long-standing principle of social justice and involves allocation of material or human resources towards those who by circumstance have less (Rawls, 1971). *Recognitive* justice involves recognition and respect for cultural and gender difference, and *representational* justice involves equitable representation and political voice (Fraser, 1995; Keddie, 2012; Young, 1997).'

All three dimensions are interrelated and reinforcing but are not reducible to each other and thus stand as their own dimensions (Fraser 2005). The opposite end of redistribution is

¹²⁸ In South Africa, for example, Ubuntu philosophy is described through the phrase, 'I am because we are' (Menkiti 1984:171). In this philosophy, priority is given to the community rather than to the individual; personhood is founded on the interrelations between people (Platzky Miller 2018).

¹²⁹ Mbembe (2019) highlights various turns such as the decolonial turn, the ontological turn, the cultural turn, the Anthropocene turn, the new material turn, the affect turn. I would even add the open turn onto this list of turns.

¹³⁰ Fraser is critical of the overemphasis of identity politics i.e. recognition based solely on race, gender, sexuality, ethnicity etc., as this draw's attention away from maldistribution and the adverse effects of neoliberal capitalism increasing wealth inequality (Fraser 1999). She is also critical of liberal feminism for this reason

¹³¹ This concept is similar to the emphasis on capabilities in the capability approach.

maldistribution, where people are inhibited from participating equally due to economic and class structures, for example inequalities in infrastructure, education, health care etc. (ibid.). The opposite end of recognition is misrecognition, where hierarchies of status deny people equal respect and opportunity for example, race, gender, sexuality, religion, nationality (ibid.). The opposite end of representation is misrepresentation and misframing, where frames prevent the marginalised from challenging the forces that oppress them (ibid.). Fraser (2005) outlines misframing as the defining form of injustice in the age of globalisation where international corporations and transnational organisations are shielded from democratic control. In all of these dimensions, she differentiates between *affirmative responses*, which pushes the boundaries of the frames but essentially accepts them, and *transformational responses*, which question the frame-setting itself.

3.4.3 Conceptualisations of Social Justice in Education in South Africa

In the past 15 years, social justice theories from the aforementioned Global North social justice scholars, in addition to the work of Sen (1999, 2009)¹³², have been applied to analyse injustices in the South African education system and have birthed a pool of social justice literature specifically relevant to South African contexts (Bozalek and Boughey 2012; Dachi and Tikly 2008; Hlalele 2012; Hodgkinson-Williams and Trotter 2018; Pendlebury and Enslin 2004; Tikly and Barrett 2013; Walker and Unterhalter 2007).

One example is that of Pendlebury and Enslin (2004), who draw on the work of I. Young (1990),¹³³ Nussbaum (2000) and Miller (1999) to emphasise how political injustices and educational injustices are inextricably linked. They argue that redistributive justice alone is insufficient in light of domination and oppression that function to exclude people. Beyond justice in *outcomes*, justice needs to focus on *procedures* such as the ‘discriminatory practices commonly built into the institutional procedures for school admission’ (Pendlebury and Enslin 2004:33). Their work highlights structural inequalities particularly relevant to South Africa, such as the difference between external exclusion (e.g. apartheid) and internal exclusion, which is ‘pretence of inclusion’ where the previously excluded ‘remain on the margins of deliberation, silenced or ignored.’ (Pendlebury and Enslin 2004:32). Drawing on this, they argue that

¹³² While Sen is of the Global South, much of the scholarship he draws on is from western theorisations of justice. Sen’s ‘double vision’ (See Section 3.5.2), traversing both worlds and comparing (See Section 3.5.3.2), is likely to have contributed to the strength of his capability approach and his ideas on justice.

¹³³ There are four authors referenced in this research with the surname ‘Young’. I. Young (1990) refers to Iris Young. (M. Young (1990) refers to Michael Young).

‘educational exclusion – both external and internal – serves as a barrier to genuine political inclusion and participation, as well as to self-development.’ (Pendlebury and Enslin 2004:47)

From this we see social justice concepts being applied and built upon locally, making explicit issues of power, domination, and exclusion within the South African context. Post-2015, however, social justice discourses in South Africa take a decolonial turn from the influence of 2015 and 2016 student protests for free, decolonised education (Hodgkinson-Williams and Trotter 2018; Luckett and Shay 2017; Unterhalter et al. 2019). This turn is expressed in the recent works of Unterhalter et al. (2019:104)¹³⁴ on higher education and inequality:

‘Over the last few years, this focus in the South African literature has increasingly sought to grapple with the issues and complexities of decolonising university curricula as a central social justice concern within the country’s higher education system ... Important here is the literature that has emerged dealing with the period since 2015 and the system-wide student protests captured through the #RhodesMustFall and #FeesMustFall movements.’

We also begin to see an *explicit* emphasis on epistemic injustices:

‘A resonance could be seen between this notion [of common good] and scholarship about collective forms of belonging, epistemologies, culture and values, sometimes described as a feature of African ways of knowing (Waghid, 2014), epistemic/ethical relationships (Hoffman & Metz, 2017) or postcolonial epistemologies (Mamdani, 2017; Nyamnjoh, 2012; Mbembe, 2016) which identify common experiences of knowledge hierarchies, dispossession, racism, violence, and connected inequalities.’ (Unterhalter et al. 2019:79)

Drawing on the notion of epistemic injustices, Hodgkinson-Williams and Trotter (2018) build upon Fraser’s (2005) global justice framework¹³⁵ to develop a social justice framework for understanding Open Educational Resources and Practices in the Global South. This framework is used in Section 3.6 to build the DoHI Framework.

¹³⁴ Unterhalter (2003a, 2017; 2007; 2007) is a renowned South African scholar in the field of capabilities, justice and education, and thus the decolonial turn in her work shows the impact of the student decolonisation protests on theorisation of justice.

¹³⁵ Fraser’s (2005) work highlights recognitive injustices in terms of recognition and respect for cultural differences (i.e. different ways-of-being) but it does not make explicit the epistemological dimension.

3.5 Decolonial Discourses

3.5.1 Overview of Decolonial Thought

This section explores the theoretical framing of decoloniality. Decolonial discourses rose out of various ‘ex-colonised epistemic sites’ such as Latin America, Caribbean, Asia, Middle East, and Africa (Ndlovu-Gatsheni 2015:489); often under differing names and banners, but highlighting one central theme: colonialism is not simply an event in history that has passed, but is rather part of a broader and long-lasting project. In this broader understanding, decoloniality speaks from sites that have experienced ‘the slave trade, imperialism, colonialism, apartheid, neo-colonialism, underdevelopment, and neo-liberalism including Washington Consensus and structural adjustment programs.’ i.e. from the sixteenth century to date (Ndlovu-Gatsheni 2015:486). Decolonial movements argue that despite political emancipation in the late 20th century, ‘domains of culture, the psyche, mind, language, aesthetics, religion, and many others have remained colonized’ (Ndlovu-Gatsheni 2015:485).

In Africa, and within African diaspora, decolonial movements have existed under various banners such as ‘Ethiopianism, Garveyism, Negritude, Pan-Africanism, African Socialism, African Humanism, Black Consciousness Movement, and African Renaissance.’ (Ndlovu-Gatsheni 2015:488). Notable African scholars, intellectuals, poets, and activists who have engaged in the long-standing impacts of colonialism include Blyden (1967), Fanon (1961, 1967), Nkrumah (1967, 1970), Chinweizu (1975, 1987; 1980), and Thiong’o (1986), amongst others.¹³⁶ Nkrumah is known for coining the term ‘neo-colonialism’ in his book ‘Neo-colonialism: The Last Stage of Imperialism’. While scholars like Rodney (1972) and Amin (1974) focused on ‘underdevelopment’ and ‘dependency’ i.e. the economic strand of coloniality which had been the main focus after political freedom, scholars like Thiong’o (1986) focused on the psychological, epistemological, cultural and linguistic manifestations of coloniality (Ndlovu-Gatsheni 2015:487).

While the early African scholarship has been largely disparate, The Latin American decolonial scholars such as Quijano (2000, 2007), Dussel (1997, 2006), Mignolo (2002, 2007, 2011a, 2018), Maldonado-Torres (2007, 2016, 2017) and Grosfoguel (2002, 2007, 2011, 2013) have been highly influential in formalising decoloniality as a school of thought. In particular, the

¹³⁶ It is important to note that while these scholars spoke of the long-standing impacts of imperialism and colonialism, they did not speak under a unified framework of decoloniality or use the term ‘coloniality’.

term coloniality was coined by Quijano, and further developed by Mignolo and Maldonado-Torres:

‘Coloniality is different from colonialism. Colonialism denotes a political and economic relation in which the sovereignty of a nation or a people rests on the power of another nation, which makes such a nation an empire. Coloniality, instead, refers to long-standing patterns of power that emerged as a result of colonialism, but that define culture, labour, intersubjectivity relations, and knowledge production well beyond the strict limits of colonial administrations. Thus, coloniality survives colonialism. It is maintained alive in books, in the criteria for academic performance, in cultural patterns, in common sense, in the self-image of peoples, in aspirations of self, and so many other aspects of our modern experience.’ (Maldonado-Torres 2007:243)

Drawing upon this conceptual distinction, Maldonado-Torres (2016:440) defines decoloniality as:

‘the dismantling of relations of power and conceptions of knowledge that foment the reproduction of racial, gender, and geo-political hierarchies that came into being or found new and more powerful forms of expression in the modern/colonial world.’

Thus, decoloniality refers to the *process* of the removal of colonial legacies rather than the historical *period* in which colonial rule collapsed; colonialism cannot be decoupled from ‘the broader wave of Euro-North American-centric modernity that radically transformed human history.’ (Ndlovu-Gatsheni 2015:486). The three main concepts in decoloniality are thus *coloniality of power*, *coloniality of knowledge*, and *coloniality of being*.

Coloniality of power refers to ‘global hierarchies’ of ‘sexual, political, epistemic, economic, spiritual, linguistic and racial forms of domination and exploitation’ (Grosfoguel 2007:217). These hierarchies are intersectional and entangled, in particular ‘the racial/ethnic’ and ‘Euro-American/non-Euro-American’ divides which ‘transversally reconfigure’ all power relations (Grosfoguel 2007:217). Mignolo (2007:155) refers to this as the ‘colonial matrix of power’.

Coloniality of knowledge focuses on epistemic hegemony, particularly ‘the politics of knowledge generation, as well as questions of who generates which knowledge and for what purpose’ (Ndlovu-Gatsheni 2015:490). It assists in understanding ‘how endogenous and indigenous knowledges have been pushed to ... “the barbarian margins of society”’ (ibid.).

Coloniality of being emphasises ‘the effects of coloniality in lived experience and not only in the mind.’ (Maldonado-Torres 2007:242). It refers to the ontological dimension of coloniality ‘expressed partly in Western civilization by the West’s philosophical discourse’s monopoly on the meaning of Being, or to be more precise on its exclusive possession, control, and exercise of the philosophy on existence’ (Gonzalez 2011:7).

Thus far I have expanded on what (de)coloniality *is*, however, of key importance to this thesis is what decoloniality *is not*, or rather, among the various schools of thought, which decolonial stances I have chosen to align with. In doing this, it is useful to distinguish between similar discourses that exist in the same space. The first is that decoloniality does not equate to anti-colonialism. Ndlovu-Gatsheni (2015:488) outlines that anticolonialism became ‘largely an elite-driven project’ where black elite sought to take the place of white colonial powers under the guise of nationalism or Africanisation (Fanon 1967; Gayatri Chakravorty. Spivak 1990; Mbembe 2001). Decoloniality involves challenging racial hierarchies *and* asymmetrical power relations, whereas anti-colonialism seems to only address the former. Grosfoguel (2007:212) highlights that decoloniality

‘is not an essentialist, fundamentalist, anti-European critique. It is a perspective that is critical of both Eurocentric and Third World fundamentalisms, colonialism and nationalism. What all fundamentalisms share (including the Eurocentric one) is the premise that there is only one sole epistemic tradition from which to achieve Truth and Universality.’

The second distinction is between decoloniality and postcolonialism. These theories share similarities but diverge on key points. Both critique the colonial experience beyond a political and economic lens, dealing with themes of culture, identity and modernity. The first difference is that postcolonialists begin their critique in the nineteenth century, whereas decolonialists mark the unfolding of modernity-coloniality in the sixteenth century when domination and exploitation of non-Western people began and transformed over time (Grosfoguel 2007:218). The second difference is that postcolonialist tend to focus on metanarratives, whereas decolonialists focus on ‘questions of power, epistemology, and ontology’ as the fundamental questions (Ndlovu-Gatsheni 2015:491). The third difference is that decoloniality claims to trace its foundations to thinkers from the ‘underside of modernity’ i.e. coloniality (Mignolo 2011b), whereas postcolonial scholars draw on poststructuralist and postmodernists, i.e. Western scholars (albeit those that are self-critical of the West) (Ndlovu-Gatsheni 2015:491).

This third point can be contested. Many of the decolonial scholars *have* in fact drawn on Western scholars¹³⁷ and it would be difficult to envision that these Western scholars have never influenced their work, even if to highlight contradictions. Furthermore, to exclude crucial and relevant work from the West, such as critical theory from the Frankfurt school, merely because of its social location, seems counter-intuitive to countering hegemony. Mbembe (1999) warns against a ‘self-ghettoization’ whereby only those who are native to a place are permitted to produce knowledge.

While African and Latin American decolonial works have been outlined above, other notable work in counter-hegemonic and decolonial thinking include Connell’s (2014) *Southern Theory* and Santos’ (2014) *Epistemologies of the South*.

3.5.2 Embodied and Situated Knowledges in Decolonial Thought and Feminist Standpoint Theory

Linking with embodiment, decolonial scholars such as Grosfoguel make explicit the ‘bodypolitics of knowledge’, whereby one speaks from ‘a particular location in power structures’ (Grosfoguel 2007:213). Grosfoguel (2007:213) highlights ‘the locus of enunciation, that is, geo-political and body-political location of the subject that speaks’, is in juxtaposition to the ‘Western myth’ or ‘the disembodied and unlocated neutrality and objectivity of the ego-politics of knowledge’. Similarly, feminist standpoint theorists argue that ‘[t]he social situation of an epistemic agent—her gender, class, race, ethnicity, sexuality and physical capacities—plays a role in forming what we know and limiting what we are able to know’ (Bowell 2019).

Feminist standpoint theorists and decolonial theorists differ semantically in discussing social location. Grosfoguel (2007:213) emphasises that:

‘It is important here to distinguish the ‘epistemic location’ from the ‘social location’. The fact that one is socially located in the oppressed side of power relations, does not automatically mean that he/she is epistemically thinking from a subaltern epistemic location. Precisely, the success of the modern/colonial world-system consist in making subjects that are socially located in the oppressed side of the colonial difference, to think epistemically like the ones on the dominant positions. Subaltern epistemic perspectives are knowledge coming from below that produces a critical perspective of

¹³⁷ For example, Maldonado-Torres (2007) draws on Levinas and critically reflects on the works of Heidegger, Sarte, Husserl and Derrida.

hegemonic knowledge in the power relations involved. I am not claiming an epistemic populism where knowledge produced from below is automatically an epistemic subaltern knowledge.’

In contrast, feminist standpoint theory deal with this concern by clarifying the difference between a *perspective* from a social location due to simply being a member of that marginalised group, versus a *standpoint* which is earned through collective political struggle (Harding 1991:127).

A useful concept from feminist standpoint theorists is that marginalised groups are socially situated such that they are more aware of inequalities and assumptions than those that are non-marginalised, and this can give them an epistemic advantage through having a *double vision* (Bowell 2019). This epistemic advantage can, however, remain unrealised due to lack of political consciousness and the need to suppress one’s identity as a marginalised person in order to fit in (ibid.). Feminist standpoint theories remain committed to what they term ‘strong objectivism’ which aims to eradicate distortion of knowledge that occur through the marginalisation of certain knowledge groups (Harding 1993). Strong objectivity is achieved through acknowledgement of social location, and resultantly reflection and self-critique of one’s standpoint, rather than rejection of social location.¹³⁸ Decolonial thought, similarly, speaks of the pluriversal in place of the universal, where ‘pluriversality is not cultural relativism, but the entanglement of several cosmologies connected today in a power differential’ (Mignolo 2018:x).

One shortfall in Grosfoguel’s (2007) hierarchies is that it often poses dualities; one is either from one epistemic location or another. However, the aftermath of colonialism left a legacy of confused and intersecting identities and cultures. It is useful to draw on postcolonial scholar, Bhabha (1994:2), who argues that the colonised subject is ‘neither self nor other’, but rather a hybridised identity of ‘otherness of the self’. He emphasises that cultures continuously evolve and are not fixed to one period. The notion of fixity in culture is a result of stereotyping by colonialists (ibid.). Hybridity happens at the level of race, language, literature, culture and religion and occurs in various intensities and forms. Fanon (1961) similarly highlights that precolonial practices have been lost or warped, and that identities today are a combination of our experiences. He asserts that new present-day identities be formed for the current hybridised

¹³⁸ ‘Strong objectivism is compatible with social constructionism, as it similarly takes the stance of an objective reality that is perceived through one’s social location.

being. Singh (2009) argues that hybridity lies on a spectrum of influence; while some are actively pursuing the culture of the colonisers, others unknowingly adopt it. The effects of Western invasion cannot be removed but a critical consciousness allows one to be aware of ingrained colonial logic. As identities are hybridised, this brings in new questions of what a decolonised education looks like.

3.5.3 Decolonisation of Education

A key feature of decolonising education is the liberation of the mind. The Black Consciousness Movement (BCM) from 1960's sought to conscientize the marginalised that the Renaissance Man – the enlightened, refined, civilised, cultured man – was not the ideal and universal archetype that they had been taught to believe (Magaziner 2010). Through this process, the attitudes of the colonised changed to wanting to reclaim their identities and lost humanities. For Fanon (1961:159), a liberating education involved 'opening their minds, awakening them, and allowing the birth of their intelligence...in the end everything depends on the education of the masses, on the raising of the level of thought...'.¹³⁹ However, what constitutes a decolonised education remains under debate. This section discusses these debates drawing on the works of foundational decolonial thinkers as well as contemporary critical thinkers¹⁴⁰ who have reflected on the 2015 and 2016 decolonial movements in South Africa.

3.5.3.1 *Local Relevance*

As has been argued previously, knowledge is inextricably linked to politics and power (Habermas 1971; Jansen 2019b). Who decides what knowledge is, what is put into the curriculum, what is left out, and what is hidden are all questions of the politics of knowledge (Apple 2012; Giroux and Penna 1979; Jansen 2019b). Drawing on Fanon, Dei and Simmons (2010) argue that marginalised students and their communities are disjointed from their education which is set by the dominant powers, in the dominant powers language, with the purpose of furthering the dominant's agenda. Thus, a decolonised education should meaningfully connect with their daily lives and needs and address the 'spiritual and emotional harm' that schooling can cause on the oppressed through the negation and 'amputation' of parts of themselves (Dei and Simmons 2010:9, 16). Furthermore, the assessments used need to

¹³⁹ Freire (1970:35) called this a 'critical consciousness'.

¹⁴⁰ While broadly in support of decolonial movements, critical thinkers that I draw upon such as Mamdani, Mbembe, Lange and Jansen would not take a 'purist' decolonial stance such that they would only draw on work from the Global South. In fact, they explicitly critique this notion of *only* drawing from Global South knowledges. As is demonstrated seen, they frequently reference Global North thinkers in their works.

provide students with ‘options and opportunities to display their brilliance, talents and educational excellence’ (Dei and Simmons 2010:12).

Beyond the need for democratisation of access to knowledge, is the need for ‘de-hegemonization of knowledge, de-Westernisation of knowledge and de-Europization of knowledge’ (Ndlovu-Gatsheni 2015:492). As language is a repository of knowledge and culture, a decolonised education needs to recognise voices, groups, methods and epistemologies that have been excluded through language (Fanon 1967; Thiong’o 2005). Thus, a decolonised education deals with social and epistemological recognition that lies at the intersection between knowledge, power and identity (Lange 2019:86). Drawing on the work of Honneth (1995), Lange (2019:87) argues that recognition is important for self-confidence, self-respect and self-esteem and defines the ethical society.¹⁴¹ Applying the concept of recognition in practice, however, is complex. In relation to the student movements in South Africa, Lange (2019:91) cautions that:

‘the call for recognition operates simultaneously at the ontological and epistemological level and that the conflation between knowledge and identity tends to focus the discussion about curriculum on Africanisation.’

Mamdani (2019) makes this point clear in the example of University of Dar es Salaam, where a nationalist curriculum was set in line with the country’s political vision to focus on local and regional challenges, including labour market needs. While acknowledging the importance of a relevant curriculum, Mamdani (2019:20) cautions against this ‘problem-solving’ approach that might produce ‘technocrats’ rather than ‘reasoning graduates’. Lange argues more strongly that Africanisation is ‘epistemologically and politically isolating’. Furthermore, there is no unanimous understanding of what is ‘African’. Bearing in mind the thousands of languages and cultures, ‘African’ knowledges should not be romanticised as beyond critique (Mbembe 2019:241).

Lange (2019:95) argues instead for ‘a pedagogy and a curriculum of *presence*’ that affirms ‘the students and their blackness, of their selves, their bodies, their identities and in particular their direct and indirect (intergenerational knowledge) experiences of the world’.¹⁴² This approach *decentres* Euro-centric knowledge and makes room for engaging with a *plurality* of epistemic

¹⁴¹ Note here the use of the social justice notion of ‘recognition’ in relation to decolonial thought. This connection will be fully expanded in Section 3.6

¹⁴² Lange draws on the work of Mbembe (2001) to make this argument.

traditions and their entanglements, particularly those in the Global South. Through a focus on institutional culture and the learning environment, i.e. factors *surrounding* content and curriculum, emphasis is placed on revising language of instruction, pedagogy, assessment, and assumptions of student autonomy (ibid.). Here, factors that impact the ability of a student such as historical inequality, home backgrounds and socio-economic standards are considered.

Regarding plurality, the difference between diversity and *epistemic diversity* is noted. Despite the existence of black lecturers and a growing black student population, the institutional culture has been inhospitable to black identities (Lange 2019:85). In the calls for decolonisation, black students (and academics) highlighted that they had to assimilate into a culture that was alien to them (RMF 2015). In ‘transformation’ processes over the last few years, cosmetic changes have been made in universities such as African print graduation gowns, a few more black academics in senior positions, and renaming of sites to African heroes, however the institutional structures, cultures and administrative functioning’s has remained largely the same (Lange 2019:85). As Makgoba and Seepe (2004:22) argue, diversity is not about multi-racialism but about a ‘reorganisation of power and privilege’. This needs to embrace different ways-of-knowing and ways-of-being.

3.5.3.2 *Global Excellence*

Mamdani (2019:16) argues that while relevance is important for African universities to decolonise, they also need to strive for excellence: ‘The challenge in higher education, in Africa and else-where, is to be both responsive to the local and engaged with the global.’ He highlights that the problem with excellence is that standards which indicate rigour have largely been formulated in the West. African universities may be in Africa, but have been and are shaped by the institutional form, intellectual content, and research methodologies of the colonial and Enlightenment experience (Mamdani 2019:16; Ndlovu-Gatsheni 2015:489; Thiong’o 2005). Mamdani (2019) contends that the strength of a theory lies in its comparisons; Europe is the bastion of theory because, in their mission to conquer the world, they compared – categorised, classified, mapped and ordered – everything. However, they theorised everything from their ‘superior’ colonial perspective with the West as the reference point. The West have created theories that the rest of the world now follows.

Thus, knowledge has become institutionalised by hegemonic powers. As Lange (2019:93) highlights, ‘knowledge itself has a history and the history of disciplines and fields of study are shaped by power relations that are themselves born in historical contexts.’ Dei and Simmons

(2010:9) similarly discuss the need for ‘decolonisation at the level of discourse’ that problematises the ‘Eurocentric prisms’ through which discourses are framed, making it hard to oppose inbuilt ‘hegemonic form, logic and implicit assumptions’. Part of decolonising education is affirming and validating local experiences and epistemologies, such as oral traditions or religious lenses, where a plurality of voices, experiences, histories and knowledges can be legitimised, claimed and celebrated.

Drawing on Mamdani (2019), local experiences should not only be validated in isolation, but *interact* with other epistemologies (including Western ones but more specifically South-South relations that decentre the metropole) in order to make comparisons and build theory with the strength of *multiple* reference points for a more holistic overall picture. This is in line with Fanon (1961:164), who expressed the need for South-South interactions: “What we want to hear about are the experiments carried out by the Argentinians or the Burmese in their efforts to overcome illiteracy or the dictatorial tendencies of their leaders”. Mamdani (2019:16) further asserts that in building theory, it is unavoidable to be subjective as we see the world through the lenses that we know and understand. Thus, aligning with critical pedagogy, one needs to be conscious of one’s subjectivities and critically reflect on one’s position (*ibid.*). Emphasising knowledge exchange between different epistemologies serves to make explicit one’s own subjectivities thereby strengthening the global knowledge base.

The work of Hoadley and Galant (2019) push the discussion on validation even further, highlighting lack of discussion on evaluation of decolonised content. In recognising that knowledge has become institutionalised through a Western perspective, they further enquire how ‘intellectual validity of what passes as decolonised knowledge’ is established, if it should at all (Hoadley and Galant 2019; Jansen 2019b:7)? Without an evaluative framework, it is hard to engage with the practice of doing decolonisation. This disjoint between high theory and practicalities remain hotbeds of debate (Lockett and Shay 2017).

3.5.3.3 *Neoliberalism in Education*

In Section 3.5.1, it was highlighted that coloniality did not end with the end of colonisation but has transformed. This section focuses on neoliberalism in education; from the institutionalisation of knowledge to the corporatisation of knowledge. African education systems today are a historical product of remnants of precolonial traditions, and colonial, exploitative educational models, as well as a new imposition of neocolonial policy borrowing (Enslin and Horsthemke 2016). These neoliberal policies, for example, structural adjustment

policies set by the World Bank and the International Monetary Fund, turned higher education in many developing countries into a private good and aligned its goals with industry needs rather than a pursuit of knowledge (Chisholm et al. 1999; Mamdani 2019). As outlined by Baatjes (2005:1), Higher Education institutes in South Africa ‘cannot escape the onslaught of neoliberal militancy that claims to provide the revolutionary solutions to social problems in a country still heavily stained with the deeply rooted legacies of apartheid’.

Thus, as important as discussions on historical injustices are, they should be analysed in conjunction with the neoliberal agenda of commodification, capitalisation and industrialisation of education models effecting the entire globe presently (Enslin and Horsthemke 2016). Auerbach et al. (2019), in their experience of trying to set up a decolonial programme at a pan-African neoliberal university, reflected that ‘the logics of neoliberalism are just as potent a politicising force as any’. Highlighting neoliberal forces, Mbembe (2016:30) states:

‘Universities today are large systems of authoritative control, standardization, gradation, accountancy, classification, credits and penalties. We need to decolonize the systems of access and management insofar as they have turned higher education into a marketable product, rated, bought and sold by standard units, measured, counted and reduced to staple equivalence by impersonal, mechanical tests...’

Auerbach et al. (2019) and Soudien (2019) highlight that attempts by academics to decolonise their courses and faculties are often stifled when this comes into conflict with the institutions neoliberal aims or its public image. Lange (2019:94) argues that to gain institutional support, mobilising a critical mass of concerned academics is needed to ‘deauthorise’ it from within.

3.5.3.4 Material Realities

Thus far, discussion has mainly theorised decolonisation terms of coloniality of knowledge and power. This section focuses on their entanglements with material inequalities. As depicted in student demands highlighted in Section 2.2.5, the demands for decolonisation of education not only highlighted epistemic injustices but dealt with their material realities as well. They brought to the fore the socio-economic struggles they face such as travel costs from the townships to university, cost of textbooks and poor living conditions (Langa et al. 2017; Moosa 2016; RMF 2015). Whilst the students’ voices were from the university, their demands included broader societal aims such as rights of workers and the solidarity with trade unions (Moosa 2016).

However, discourses that have been taken up by institutions, conferences and peer-reviewed journals tend to theorise students calls for decolonisation as a call to addresses epistemic injustices in the curriculum, that is decoupled from the need to address socio-economic problems at the societal level. They (e.g. (Jansen 2017)) locate calls for decolonisation within the university space, and particularly in its curriculum. The multi-layered background of the student movements thus needs to be kept in mind to not exclude the voices of marginalised university students that do not always end up in peer-reviewed journals. Drawing on Section 3.5.1, decolonial thought sought to go *beyond* merely addressing material and economic injustices, to address the colonisation of the mind, however many works on decolonisation seem to now *only* focus on the epistemic injustices, and overlook material injustices. Furthermore, epistemic injustices are focused on with university as its locus (as the institutionalised place of knowledge production), with a narrowed vision of decolonising at the level of curriculum, and in some cases, simply decolonising reading lists. This narrowing can exclude other sites of knowledge production, and in a way reifies the university as the only place of knowledge production.¹⁴³ Figure 3-3 depicts a non-exhaustive attempt to illustrate the broader movement of decolonial thought and the different levels at which it is discussed.

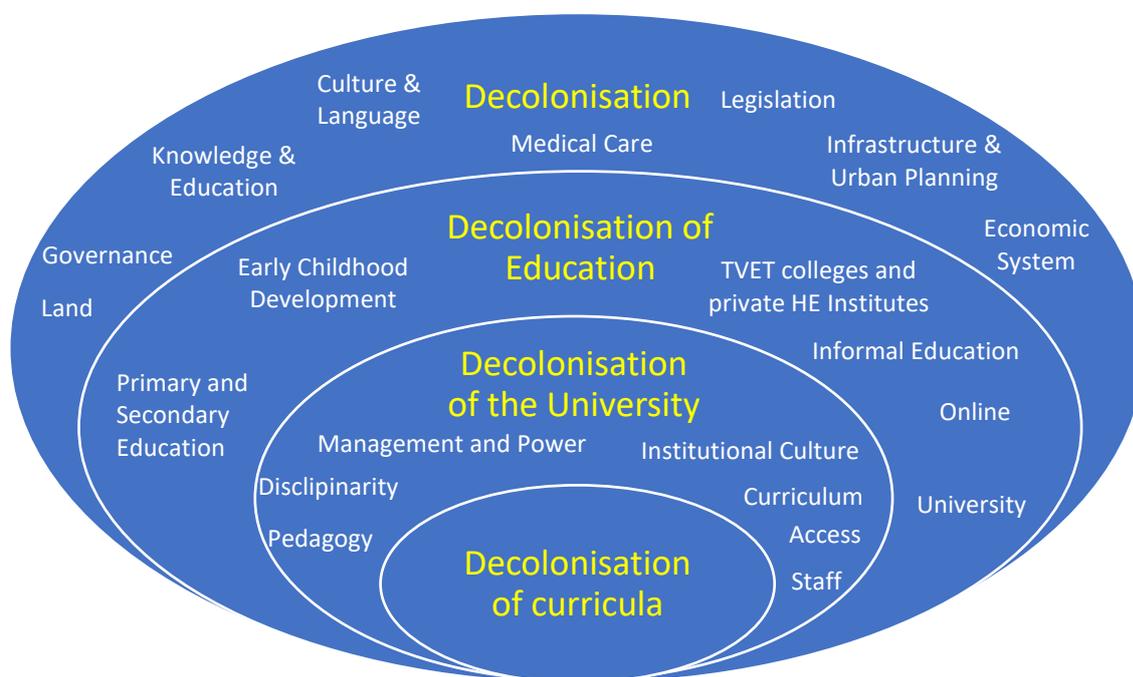


Figure 3-3 Levels of decolonisation

Source: Author's own

¹⁴³ The locus of enunciation is particularly important to my research that looks beyond the site of the university to understand the perspectives and socio-economic conditions of youth *outside* of the university space that do not have the luxury of ‘organized expression’ of the university students (Mamdani 2016:68).

3.5.4 Digital Neocolonialism

In my article on digital neocolonialism and MOOCs (Adam 2019), I defined *digital neocolonialism* as *the use of technology and the internet by hegemonic powers as a means of indirect control or influence over a marginalised group or country*. In digital neocolonialism, hegemonic powers need not be a nation state, as in colonialism, but could be a corporation or institution.

Digital neocolonialism is a form of economic, social, or cultural hegemony exercised through the internet and technology (Knowledge Commons Brasil 2014); it attempts to control a community, exploit it economically, and erase its identity (Martini 2017). Similar discourses include *cyber-colonialism/cyber imperialism* centred around the dangers of forced dependence on information technology from digitally-advanced countries (Danezis 2014), and *data colonialism* focusing on ethics in the collection and use of data (Model View Culture 2016). *Technology colonialism* (Simmons 2015) and *techno-capitalism* (Suarez-Villa 2009:3) focusing on ‘corporate power’ and ‘exploitation of technological creativity’ in the contemporary knowledge economy. For example, the ubiquitous impact of *platform capitalism* via companies like Amazon, Google, Facebook, Ali Baba, Uber and others, have captured the market share and formed monopolies, using mergers and acquisitions of smaller companies to feed their data needs and to eliminate competition. Such platform models have an insatiable need for more data and will go to lengths to get it, infringing on privacy or workers’ rights (Srnicek 2017). Economic motives are often masked as charitable actions such as Facebook Free Basics which aims to expand data acquisition into untapped areas (Solon 2017).

Technology is often considered synonymous with ‘progress’ and ‘development’, both of which became uncriticised goals set by the United Nations in the christening of ‘the under-developed’ world in 1949 (Sachs 1992; Ulrich 1992). Through idolising Western progress, democratisation of access to technology has become an urgent necessity without questioning the essence of technology itself: ‘democratization without a corresponding ontological transformation will just end up replicating and reifying the technological understanding of being’ (Thomson 2001:67).

Whilst vast amounts of literature focus on who is left out by the digital divide and the new big data divide, adverse incorporation into these ‘global’ systems receive far less attention. Heidegger (1977) warned of a time when calculative thinking might someday come to be the only form of thinking, and we can see this with the rise of technocracy. Technology is changing

what we know, as well as how we come to know it (Laurillard 2008), which leads to the amplification of epistemic injustices.

Discourses problematising inequalities embedded in information technology include decolonial computing, critical software studies, and critical algorithm studies. Using critical race studies, feminist theory, and decolonial perspectives, such discourses push beyond simply isolating the problems to its use and content, to discussions of who creates information technology, who its designed for, and the ‘embeddedness of coloniality – that is, the persistent operation of colonial logics’ (Ali 2017). These critiques focus on who has power, who has agency, and whose agendas are promoted, through analysing how information technology is developed, distributed and capitalised (Martini 2017).

Decolonising technology aims to destabilise hegemonic, capitalistic, and neoliberal practices embedded in technology through subversively turning it into tools for resistance and liberation. The level at which technology should be used in decolonial futures varies widely between scholar-activists, ranging from seeking a re-envisioning of the uses of technology in our lives through radical-reform, to taking a more weary anti-technology, beyond-reform stance (Feenberg 1999; Heidegger 1977; Illich 2001).

3.6 Analytical Framework: Merging Social Justice and Decolonisation Discourses

As argued in Section 3.4 and 3.5, social justice and decolonial discourses have been influencing each other in the past decade, particularly in the South African education landscape, and have begun to converge. In this section, I tie together social justice frameworks and decolonial approaches to have one unifying analytical framework for addressing injustices. The intention is to shift away from the historical baggage and terminology of the two schools of thought that have become associated with certain parochial meanings that limit a holistic understanding of the injustices that need to be addressed.¹⁴⁴ The reason for focusing on injustice, rather than justice, follows Sen’s reasoning to focus on ‘eliminating undeniable “injustice” rather than pursuing a transcendental justice which might not be feasible despite providing a complete ordering in evaluation’ (Hirai 2017:125; Sen 2009).

¹⁴⁴ Social justice applications tend to be more associated with redistributive justices and decolonial discourses tends to be more associated with Africanisation. In both cases, this is limiting. These interpretations of the two discourses are depicted in Chapter 8 through interviewee responses.

Recent papers from Hodgkinson-Williams and Trotter (2018) and Lambert (2018) discuss social justice frameworks for Open Education Movement (OEM), highlighting three levels of justice: redistributive justice, cognitive justice, and representational justice. While both papers draw on Fraser's (2005) multi-dimensional framework for social justice, I use Hodgkinson-Williams and Trotter's (2018) interpretation for its *transformative* dimension that bears resemblance to decolonial discourses, as well as its specific relevance to South African contexts (and the Global South in general). At the level of *redistribution*, Hodgkinson-Williams and Trotter (2018:207) place strong emphasis on addressing the root causes of *maldistribution* with a call to *restructure* economic models. At the level of *recognition*, they explicitly mention epistemic injustices through what they term *re-acculturation*: 'which would respect alternative epistemic positions and acknowledge alternative authorities on what is considered to be worthwhile knowledge and dispositions.' (ibid.).¹⁴⁵ Additionally, drawing on Luckett and Shay (2017:12) whose work, in turn, has been influenced by the student protests for decolonised education, Hodgkinson-Williams and Trotter use their concept of *reframing*, beyond representation, to highlight the need to 'democratis[e] the process of frame-setting itself'.

The transformative layer of Hodgkinson-Williams and Trotter (2018) converges to the decolonial approaches that focus on systematic and structural domination and oppression through notions of *coloniality of power*, *coloniality of knowledge*, and *coloniality of being*. As decolonial discourses stress the entanglements of these injustices (Grosfoguel 2007:217), it is hard to disentangle such injustices separately, but I have attempted to with caution.

The framework in Table 3-1 maps connections between social justice and decolonial approaches to addressing injustices, where I highlight three Dimensions of Human Injustice¹⁴⁶ (DoHI): material injustices, cultural-epistemic injustices, and political/geopolitical injustices. I have intentionally kept the table generic as this bridging of social justice and decolonisation is a useful analytical tool beyond the OEM.¹⁴⁷

¹⁴⁵ In Fraser's (2005) multi-dimensional framework, epistemic injustices are not mentioned; she emphasises cultural recognition (i.e. different ways-of-being). The inclusion of epistemic injustices (i.e. the marginalisation of different ways-of-knowing) is included by Hodgkinson-Williams and Trotter (2018).

¹⁴⁶ Initial inspiration for this merging came from a blog post titled 'Can we decolonize OER/Open?' (Adam et al. 2019).

¹⁴⁷ As Jansen (2017) and Andreotti et al. (2015) highlight, there are various contestations in terms of what it means to be decolonised, thus, I aim to highlight only broadly unifying features.

Table 3-1 Merged social justice and decolonial approaches to addressing injustices

Social Justice Framework	Ameliorative Response	Transformative Response	Decoloniality	Dimensions of Human Injustice (Merged Social Justice and Decolonial Approaches)
Redistributive Injustices	Redistribution: <i>of resources</i>	Restructuring: <i>of economic model</i>	Coloniality of being + Coloniality of power	Material Injustices: <i>Addresses the causes of resource, infrastructural, geographical and socio-economic inequalities stemming from human hierarchies.</i>
Recognitive Injustices	Recognition: <i>valued, respected, esteemed</i>	Re-acculturation: <i>plurality of perspectives, but always fallible</i>	Coloniality of knowledge + Coloniality of being	Cultural-epistemic Injustices: <i>Addresses dominant conceptions of knowledge that exclude differing histories, values, narratives, and worldviews.</i>
Representational Injustices	Representation: <i>social belonging</i>	Reframing: <i>parity of rights</i>	Coloniality of power + Coloniality of knowledge	Political and Geopolitical Injustices: <i>Addresses domestic and international relations of power that reproduce racial, class, sexual, gender, spiritual, linguistic, and geographical hierarchies.</i>

Source: Adapted from Hodgkinson-Williams and Trotter (2018) with my own additions¹⁴⁸

¹⁴⁸ The ‘Ameliorative Response’ and the ‘Transformative Response’ columns are outlined in Hodgkinson-Williams and Trotter (2018). The ‘Decoloniality’ and ‘Dimensions of Human Injustice’ columns are my own, drawing on decolonial thought highlighted in Section 3.5.1.

As decolonial approaches emphasise the entanglement and reinforcement of the various oppressions on each other, Figure 3-4 best represents this with overlapping injustices.

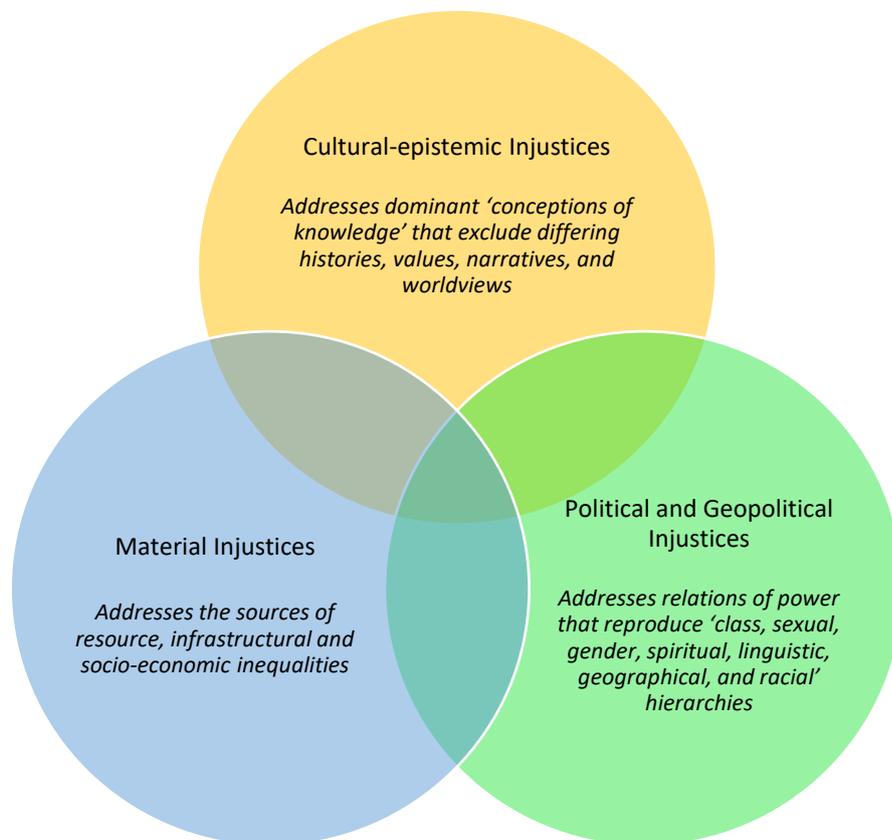


Figure 3-4 Dimension of Human Injustice

Source: Author's own

3.7 Conclusion

In this chapter, I have drawn upon various theories to formulate my conceptual framework. I outlined the philosophical underpinnings through embodied cognition theory which views that knowledge is embodied and situated. I supplement this with critical pedagogy which emphasises the dimension of critical consciousness. Following a knowledge-as-situated viewpoint, I drew on the capability approach which centres the humans involved in determining for themselves what they have reason to value in life. Thereafter, I discussed the histories and evolutions of social justice and decolonial discourses which were then drawn upon to build the analytical framework for this research: The Dimensions of Human Injustice.

In the subsequent chapters that follow, different parts of the conceptual framework will be drawn upon where relevant. Chapter 4 on methodology draws on the capability approach which strongly influences the design of survey questions. Chapter 5 again draws on the capability

approach as it attempts to understand the lives of the Potential MOOC Participants (PMPs) and what they have reason to value, particularly with regard to education and technology. Chapter 6 and 8 both use the DoHI Framework, where Chapter 6 investigates the injustices that the PMPs face and Chapter 8 reviews how MOOC designers conceptualise and attempt to address injustices in their MOOCs. Chapter 7 draws on embodied cognition and critical pedagogy to examine how MOOC designers' embodiment and epistemic locations influence their conceptualisation of openness and open educational practices. Chapter 9 draws on all of the previous chapters to synthesise approaches to designing justice-oriented MOOCs.

4 Methodology Chapter

The epistemological framings and theoretical perspectives of this research have been touched upon in the conceptual framework. This chapter builds upon this to clearly outline the research paradigm.

This chapter clearly outlines the theoretical framing of this research in Section 4.1. Here, social constructionism – the epistemological stance taken in this research – is explained, along with its compatibility with a realist ontology. Section 4.2 explains the rationale for grounded theory as the methodology and Section 4.3 explains the rationale for a mixed methods approach that uses data collection methods such as surveys and online course runs with the marginalised groups in South Africa (the Potential MOOC Participants) and semi-structured interviews with the MOOC designers. Section 4.4 highlights my positionality and reflexive thoughts on this research and Section 4.5 gives a brief summary of the fieldwork. Section 4.6 elaborates on the beta online course¹⁴⁹ and surveys which were conducted simultaneously¹⁵⁰ at five different fieldwork sites in peri-urban areas in South Africa. Section 4.7 outlines the process of the conducting semi-structured interviews with MOOC designers from South Africa, as well as a handful from Cambridge, USA.

4.1 Theoretical Framing

The epistemological stance taken in this research is social constructionism, which bares strong resemblance to what embodied cognition theorists call non-objectivism (Varela et al. 1992). Constructionism is built upon symbolic interactionism and phenomenology, and became popular through the work of Berger and Luckmann (1966). Constructionism,¹⁵¹ according to Crotty (1998:42), is the view that

‘all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context.’

¹⁴⁹ The online course was a regional beta online course designed by Khwela. I am one of the co-founders of Khwela. This relationship is discussed in Section 4.6.4.

¹⁵⁰ The surveys were built into the online course.

¹⁵¹ Depending on field of study, some authors use the term constructionism and others use the term constructivism. This research follows Crotty’s (1998:42) definition and uses the term constructionism so as to not to be confused with *learning theories* of constructivism (developed by Jean Piaget) and social constructivism (developed by Lev Vygotsky). Whilst they are very similar, they refer to learning theories rather than epistemological positions.

Constructionism emphasises interaction, interpretation and intentionality and differs from subjectivism which views that ‘meaning does not come from the interplay between the subject and object but is imposed on the object by the subject’ i.e. a complete denial of any objective reality (Crotty 1998:9). This research approach thus differs from strands of post-structuralist and post-modernist approaches that may take extreme subjectivist stances.

Building upon constructionism, social constructionism moves beyond the individual to incorporate the social into the meaning-making process; that is, the history and culture which ‘precede us’ and to which we are ‘born into’ and ‘embedded’ into that function as ‘a publicly available system of intelligibility’(Crotty 1998:52, 54; Young and Collin 2004).¹⁵² This epistemological stance thus strongly overlaps with embodied cognition theory that understands culture as guiding human behaviour.

This research takes the approach that social constructionism can be ‘at once realist and relativist.’ (Crotty 1998:63; Young and Collin 2004).¹⁵³ This is because there is a distinction between realism and objectivism. Realism is ‘an ontological notion asserting that realities exist outside the mind’ (Crotty 1998:10). Objectivism is ‘an epistemological notion asserting that *meaning* exists in objects independently of any consciousness’ (Crotty 1998:10). Drawing on Heidegger and Merleau-Ponty who argue ‘a world already there’ yet do not take on an objectivist epistemology, Crotty (1998:63) asserts that ‘constructionism in epistemology is perfectly compatible with a realism in ontology’. Constructionism thus brings together elements of objectivity and subjectivity to emphasise ‘experienced reality’ (Crotty 1998:44).

Drawing on the above, Table 4-1 outlines the research paradigm. Sections 4.2 and 4.3 will respectively outline the rationales for a grounded theory methodological approach and a mixed method approach in data collection.

¹⁵² There are four authors cited in this research with the surname ‘Young’. Young and Collin (2004) refer to Richard Young.

¹⁵³ While a realist position is taken here, this is not the case for all social constructionist stances. There are various definitions of constructionism, some that put it much closer to subjectivism (Taylor 2018).

Table 4-1 Research paradigm

Ontology (A way of understanding what is)	Realism
Epistemology (A way of understanding how we know what we know)	Social Constructionism
Theoretical perspective (A set of assumptions about reality)	Embodied Cognition Theory
Methodology (A system of methods or processes informing the study)	Grounded Theory
Methods (The methods and techniques used to gather and analyse data)	Mixed Methods (Qualitative and Quantitative Methods) <ul style="list-style-type: none"> • Pilot Studies • Surveys • Semi-structured Interviews

Source: Author's own

4.2 Rationale for Grounded Theory as Methodology

The methodology used in this research is grounded theory, which seeks to *construct* theory about issues that are of importance in peoples' lives (Glaser 1978; Glaser and Strauss 1967; Strauss and Corbin 1990). Social constructionism is not only compatible with grounded theory, but it has influenced later works (Charmaz 2008). Grounded theory is both a research product and an analytic method (Charmaz 2008), of which the latter is focused on here. As there are ontological and epistemological differences between earlier traditional works (Glaser 1978), and later evolved works (Strauss and Corbin 1990), this research aligns more with the latter. This methodology was chosen due to its strong resonance with the capability approach that centres communities defining for themselves what have reason to value (Sen 1999). The capability approach was used to inform the design of the survey questions (See Section 4.6.5).

In line with grounded theory methods, an inductive approach was used to produce theory that emerges from the research context, as opposed to forcing data into a predetermined theory or hypothesis (Glaser 1978). While traditional grounded theory was averse to reviewing literature before data collection, this research is more in line with Straus and Corbin (1990) who argue

that literature can be engaged with proactively and interwoven into research process, stimulating thinking and presenting ‘another voice contributing to the researcher’s theoretical reconstruction.’ (Mills, Bonner, and Francis 2016:29). Data collection and analysis happen concurrently in a grounded theory approach, and this was evident in my research where the data analysis from Phase 1, informed the adaptation of survey questions in Phase 2 and 3.

Straus and Corbin (1990) outline three forms of data collection and coding: open, axial, and selective coding which were used heuristically to inform my survey design. Open-ended survey questions, such as what challenges the PMPs face and what they view as an ideal life, were asked in order to openly code for a breadth of categories. In the data analysis, axial coding was used to focus on interconnecting themes, particularly to see where education and technology fitted into the broad lists of what the PMPs find challenging or value in their lives. Lastly, specific surveys that focused on technology, education and educational inequalities, were used to understand ‘core categories’ selected for further development of the theoretical propositions (ibid.).

Grounded theory emphasises constant comparison (Glaser and Strauss 1967; Strauss and Corbin 1990), and this was done in various ways. Firstly, sites were chosen in different provinces that used different languages; some areas more heterogenous and others in languages used. This allowed me to compare between different circumstances in the different locations.¹⁵⁴ Secondly, different data collection methods were used such as observations, running the online course, surveys and interviews, which allowed me to compare and triangulate emerging themes from various angles. Thirdly, data was collected from two groups with different interests – surveys and the online course with the PMPs and interviews with the MOOC designers – which added multiple perspectives for comparison.

While grounded theory outlines a systematic process, it is also sympathetic to the difficulties and realities of fieldwork as well as the researcher’s ability to think creatively, and thus does not ‘rigidly’ enforce any tools or coding processes (Mills et al. 2016:30; Strauss and Corbin 1990). Rather these tools and processes are meant to encourage deep thinking to develop ‘theoretical sensitivity’ (ibid.). Thus, while grounded theory was used, the research did not follow a strict alignment to the grounded theory coding process yet drew immensely from it.

¹⁵⁴ More details on the differences between fieldwork sites is given in Section 4.6.1.

4.3 Rationale for Mixed Methods

This research uses mixed methods which is when a researcher combines elements of qualitative and quantitative approaches to achieve greater breadth and depth of understanding and corroborate findings from the different approaches (Johnson, Onwuegbuzie, and Turner 2007). The research consisted of two main parts: the online course and surveys conducted with marginalised groups in peri-urban areas in South Africa (the PMPs), and semi-structured interviews with MOOC designers based in South Africa and the USA. The purpose was to analyse what the marginalised groups need, want and aspire to in terms of their education, and compare it to what MOOC designers create and provide, in order to understand to what extent the MOOCs being created are able to address the needs, wants and aspirations of the PMPs.

The study¹⁵⁵ with the PMPs involved the testing of a regional online course on Career Development, designed by Khwela.¹⁵⁶ Although much data was collected on the course platform itself, e.g. the baseline and endline testing, this has not been included in the research as the purpose of this study was to understand the PMPs experiences of doing an online course.¹⁵⁷ Thus, what has been focused on in this research, in terms of the online course, is the difficulties I faced facilitating the course, the observations of the PMPs while doing the course, and the feedback survey outlining the PMPs experiences of doing the course. More details on this is given in Section 4.6.3.

The survey, comprising of qualitative and quantitative questions, were built into the course. There were 6 sub-surveys at the beginning of the online course, and a seventh survey – the aforementioned feedback survey – at the end of the online course. Surveys were chosen above interviews as quantity was important to capture the responses of all PMPs that partook in the study (of which there were more than 250). Open-ended questions were used to gather a breadth of responses, and questions with predefined answers were used to understand the scale or depth of the themes. Moreover, the open-ended answers from Phase 1 were turned into predefined lists for later phases of research to determine some sort of ranking of the importance of themes.¹⁵⁸ More details on the surveys is given in Section 4.6.5.

¹⁵⁵ The word ‘study’ is used to refer to the holistic process and experience of running the online courses and conducting surveys at various locations.

¹⁵⁶ Khwela is a social venture which aims to provide marginalised groups in South Africa with access to online courses in order to educate and empower them, and moreover to assist them in finding employment. I am the co-founder of Khwela. This will be expanded in Section 4.4 and Section 4.6.3.

¹⁵⁷ The topic of the course and the course content is of less importance for this study. This type of data was more important to Khwela to show quantitative proof of improved learning doing the course to potential funders.

¹⁵⁸ The process of Phase 1 feeding into Phase 2 and 3 is part of a grounded theory approach.

On the other end of data collection, semi-structured interviews were conducted with 35 MOOC designers. Semi-structured interviews were chosen in order to discursively and flexibly unpack themes to gain a fuller understanding of how MOOC designers sought to make their MOOCs accessible and open, and whether and how they attempted to address injustices through their MOOCs. Of interest was the personal and professional identity of the MOOC designer, and semi-structured interviews allowed for these identities to be shown through the stories and examples they would share (as opposed to a static survey). More details on the semi-structured interview process is given in Section 4.7.

The mixed methods approach was not only useful, but essential in discovering and corroborating themes, triangulating findings, and finding overlaps and gaps between what the PMPs need and what MOOC designers are creating (Schoonenboom and Johnson 2017). Through including a diversity of views, locations, and data collection methods, a rigorous and exhaustive analysis of the themes researched was able to be done.

4.4 Positionality and Reflexive Thoughts

My positionality as a South African woman of Indian ethnicity played a major role in the research and cannot be neglected. As an Indian South African, I straddle the fence of disadvantage and privilege. Whilst experiencing racial discrimination and marginalisation in many ways due to my race and religion, it is not the same as the experience of the Black South African. Thus, in some ways, I am an insider, and in other ways, I am an outsider. As there is racial tension between Indian and black people in South Africa, where many Indians (in public or in private) view themselves as superior, I needed to be very cognisant of my positionality in relations.

The interdisciplinary nature of this research would not have been possible if not for my professional background in various sectors. My electronic and electrical engineering background was important in building the online course and implementing it in computer centres that had many technical issues and constraints. The years of work in the education, edtech and NGO sectors in South Africa were of crucial importance to this work to tapping into my existing networks in the space, particularly my connection to Siyafunda.

While it was often difficult to separate my work with Khwela, a social venture of which I am the co-founder, and the PhD research, it was comforting to know that my PhD research was having tangible real-world impact. In this thesis, I have outlined decisions I have made in my capacity as co-founder versus in my capacity as a researcher. As Khwela sought to critically

analyse the course and see how best it can be improved, there was no conflict of interest with Khwela's goals and the research's goals.

A big lesson learnt for me was truly working with the community, rather than asserting my views and preferences on them. I had gone in sub-consciously with the mentality that I was providing a free course and 'they should be grateful for what I was providing them' and 'take what they can get', which is a very problematic mentality in philanthropy and development.¹⁵⁹ Thus, I was guilty of the same top-down attitude that I criticise in this thesis.

One of the hardest parts, emotionally, for me, was trying to keep a distance from the participants. Some of the answers that participants gave in their surveys (for example, relating to rape) deeply distressed and saddened me as it was beyond my ability to help them and far beyond the problem I am seeking to address in this research project.¹⁶⁰ It was nevertheless, inspirational to work with such resilient communities and to see how important helping others was to their life philosophy, despite their personal difficulties.¹⁶¹

4.5 Summary of Fieldwork

Field work consisted of three trips to South Africa and one trip to Cambridge (USA), as outlined in Table 4-2. The subsequent sections of the chapter give detailed descriptions of the fieldwork sites, and the processes used to conduct the beta online course, survey collection, and the semi-structured interviews.

¹⁵⁹ This lesson was learnt when one of my venues was cancelled because I didn't listen to the needs and advice of the local staff at one of the Computer Technology Centres (CTCs) regarding the food they preferred. I was overly concerned with cost efficiency while they were concerned that the participants are unlikely to have eaten and thus, I needed to provide breakfast.

¹⁶⁰ In whatever way I could, I would assist participants after the course with further questions and queries far beyond the research objectives, but it was very draining knowing that the problems they are facing are far more complex than my research or myself would be able to assist with.

¹⁶¹ Sometimes, participants who had finished the course would come back on another day to assist me with helping others. By the last day in Ivory Park, I barely needed to do anything as there were many assistants who had learnt all the troubleshooting.

Table 4-2 Summary of fieldwork

<p>Phase 1: South Africa</p>	<p>20 March – 29 June 2017</p>	<p>In this trip, surveys and online course workshops were conducted at 3 sites:</p> <ul style="list-style-type: none"> • Cosmo City in Gauteng • Inanda in Kwa-Zulu Natal • Mankweng in Limpopo <p>The surveys were processed and analysed before continuing with further data collection in subsequent phases.</p> <p>Data collected:</p> <ul style="list-style-type: none"> • 116 usable surveys were collected • 21 interviews conducted
<p>Phase 2: South Africa</p>	<p>19 August – 11 September 2017</p>	<p>Due to complications at the Cosmo City site, a new site had to be chosen at the last minute, which resulted in delays and not as many surveys and online course workshops being conducted:</p> <ul style="list-style-type: none"> • Ivory Park in Gauteng (new site) <p>Data collected:</p> <ul style="list-style-type: none"> • 40 useable surveys were collected
<p>Phase X: Cambridge, USA</p>	<p>10 – 17 April 2018</p>	<p>The interviews done in Cambridge (USA) were opportunistic as I was travelling there for a conference. These interviews, however, greatly shaped the research as I was able to compare between South African and Cambridge MOOC designers. As time was limited, I could not conduct as many interviews as in South Africa.</p> <p>Data collected:</p> <ul style="list-style-type: none"> • 7 Interviews were conducted in Cambridge (USA), and 1 was done on Skype
<p>Phase 3: South Africa</p>	<p>2 – 26 June 2018</p>	<p>A final round of surveys and online course workshops was conducted at two sites:</p> <ul style="list-style-type: none"> • Ivory Park in Gauteng • Umgababa South in Kwa-Zulu Natal (new site) <p>Data collected:</p> <ul style="list-style-type: none"> • 94 useable surveys were collected • 7 interviews were conducted

Source: Author's own

4.6 Online Course and Surveys

4.6.1 Fieldwork Sites

As the aim of the study was to understand perspectives of marginalised youth, fieldwork sites where one could access such marginalised youth were chosen. Due to the legacy of the Group Areas Act¹⁶² in South Africa (Section 2.2.2), historically-black areas still are the poorest and most under-resourced in terms of infrastructure and amenities. Fieldwork sites were thus chosen in historically-black areas.

Peri-urban regions were chosen for two reasons. Firstly, these areas have higher access to technology,¹⁶³ in comparison to rural areas, and community members are familiar with digital devices given their proximity to the city. Secondly, many people who live in these areas have migrated from rural areas in hope of access to work or educational opportunities from the city. Such people fit the participant criteria (Section 4.6.2).¹⁶⁴

Finding a computer centre in such regions is rare but due to my prior work with an organisation called Siyafunda¹⁶⁵ (isiZulu for ‘we learn’), I knew about and was able to gain access to such locations. Siyafunda is a social entrepreneurship that sets up Computer Technology Centres (CTCs) in marginalised communities, where they offer IT courses at affordable prices. They have over 80 centres set up around South Africa. As I was running a free online course to members of the community, Siyafunda graciously allowed me to use their centres. Research was conducted at five CTCs. I requested centres that were 1.) in peri-urban regions, 2.) in a variety of provinces, 3.) had 20 – 30 computers, and 4.) had or could have access to internet. Siyafunda partnered me with centres according to these requirements and the centres availability to host me.

¹⁶² The Group Areas Act relocated populations to live in areas with their own race groups.

¹⁶³ There is electricity supply in most of these areas, albeit erratic.

¹⁶⁴ This is in comparison to rural communities who may be living agrarian lifestyles and are less likely to have a desire for formal education or online education. Furthermore, such digital/online educational models are likely to be incongruent with the amenities in those areas.

¹⁶⁵ More information about Siyafunda can be found on their website: <https://www.siyafundactc.org.za/>

The demographics of fieldwork regions are summarised in Table 4-3.

Table 4-3 Population demographics of the five research regions

	Cosmo City	Inanda	Mankweng	Ivory Park	Umgababa
Province	Gauteng	Kwa-Zulu Natal	Limpopo	Gauteng	Kwa-Zulu Natal
Nearest Main City	Johannesburg	Durban	Polokwane	Johannesburg	Durban
Area Size (km²)	9.9	26.8	14.6	9.21	6.23
Population Size	44295	158619	41298	184383	10814
Population Density (per km²)	4476	5915	2823	20020	1736
Gender (%)					
Male	50.33	47.98	46.82	54.16	48.43
Female	49.67	52.02	53.17	45.84	51.57
Race (%)					
Black African	97.23	99.40	98.31	98.82	98.78
White	0.43	0.06	0.49	0.08	0.60
Asian	0.51	0.15	0.26	0.15	0.12
Coloured	0.86	0.22	0.67	0.19	0.40
Other group	0.97	0.17	0.26	0.77	0.10
Language (%)					
isiZulu	22.16	88.33	0.90	21.38	91.14
isiXhosa	9.93	4.52	0.20	7.43	1.90
Afrikaans	1.17	0.28	0.18	0.40	0.68
English	7.35	2.35	1.54	1.71	2.64
Northern Sotho (Sepedi)	13.26	0.25	83.72	23.28	0.12
Setswana	11.52	0.46	0.69	2.64	0.65
Sesotho	6.66	0.58	0.50	4.55	0.27
Xitsonga	4.69	0.08	2.14	22.44	0.28
Tshivenda	8.27	0.04	1.39	3.02	0.02
isiNdebele	6.68	1.39	0.63	5.25	0.92
Sign Language	0.30	0.67	0.20	0.31	0.66
Other language	8.00	0.64	1.19	5.41	0.55

Source: Adrian Frith (2011a) who uses data from the 2011 census (Statistics South Africa 2011)

The following subsections provide unique characteristics and features of each site that may have impacted the research.

4.6.1.1 Cosmo City

Figure 4-1 shows the location of Cosmo City in relation to Johannesburg.¹⁶⁶

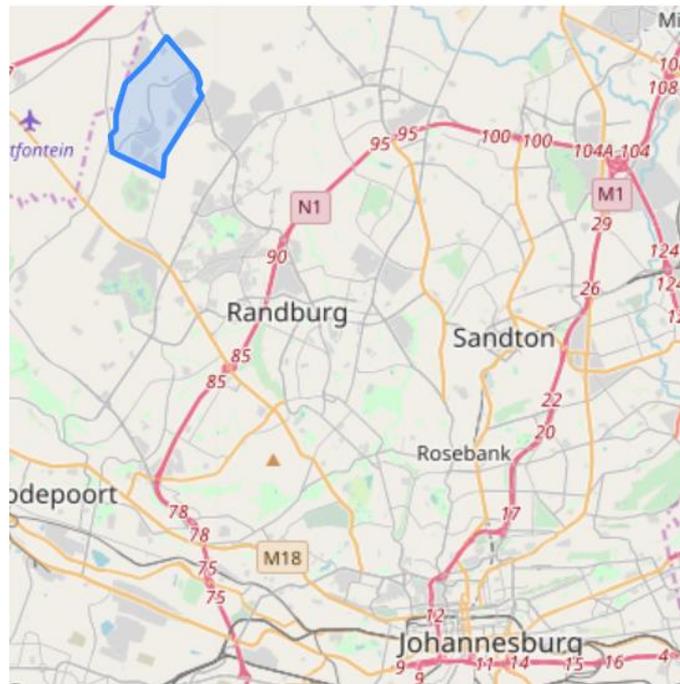


Figure 4-1 Position of Cosmo City in relation to Johannesburg

Source: OpenMaps

One might question the arbitrary nature of the segmenting of these regions, however the segments indicate significant differences in living conditions between historically-white and black areas.¹⁶⁷ Cosmo City is different from other sites in that it is a government low-cost housing development project initiated in 2004 (i.e. post-apartheid), whereas the rest are townships formed during apartheid.¹⁶⁸ As Johannesburg is already quite ethnically-diverse and this city was built with the intention to mix people, there are a plethora of languages spoken within the place, as indicated in Table 4-3.

¹⁶⁶ Unlike the other four research sites which are defined as main places, Cosmo City is defined as a sub-place of the main place of Roodepoort. Despite this, Cosmo City compares in population size and area to the other research sites.

¹⁶⁷ For example, in North Riding, a sub-place adjacent to Cosmo City with an area of 8.35 km², the population size is 1974 (i.e. a population density of 236.50 per km²) and 53.3% of the population is white (Frith 2011c). This is in stark contrast to Cosmo City which has an area size of 9.90 km², a population size of 44 295 (i.e. a population density of 4,476.06 per km²) and 97.23% of the population is black (Frith 2011b) (see Table 4-3). This is just one indicator of the differences in living conditions, let alone that differences in infrastructure, services and amenities.

¹⁶⁸ An empty plot of land was bought, and formal housing was built for those who were living in surrounding informal settlements. However, what was intended as a suburb, turned into an overcrowded township as residents' added extensions and back rooms to earn money off the property (Myambo 2014). Despite this, amenities in Cosmo City are still far better than other poorer areas, with newly built schools, libraries, and community centres.

The beta online course was run at a CTC within a multi-purpose centre, as seen in Figure 4-2.¹⁶⁹

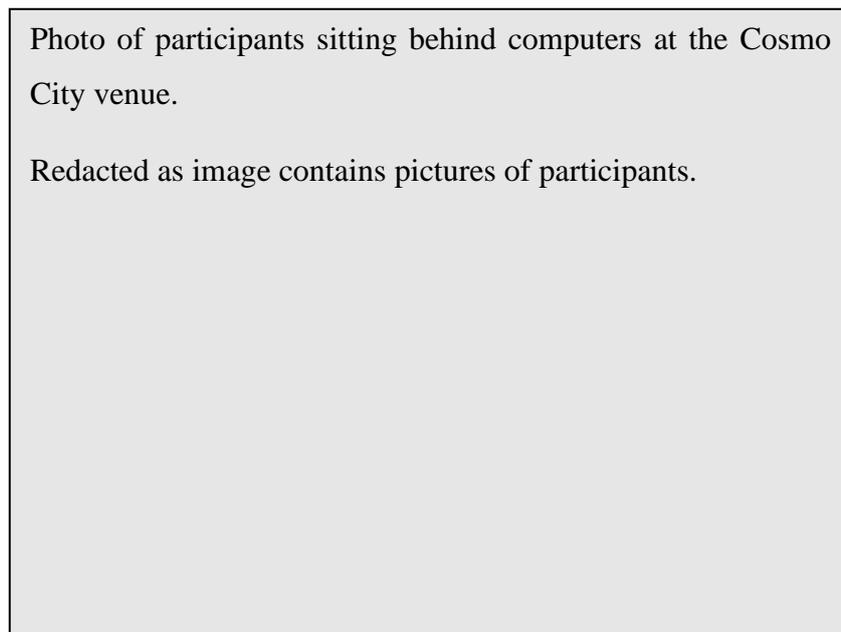


Figure 4-2 Cosmo City venue

Source: Author's own

Figure 4-3 shows the first batch of participants that completed the course.

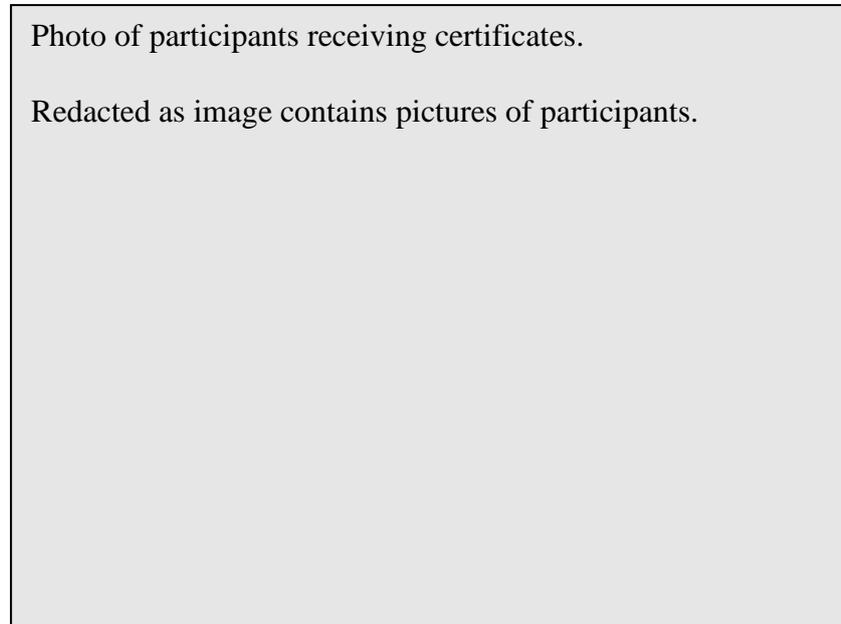


Figure 4-3 Participants on completion of the course

Source: Author's own

¹⁶⁹ The multi-purpose centre had a clinic, a computer room, printing facilities, sewing classes and a community hall.

4.6.1.2 Inanda

Figure 4-4 shows the location of Inanda in relation to Durban.

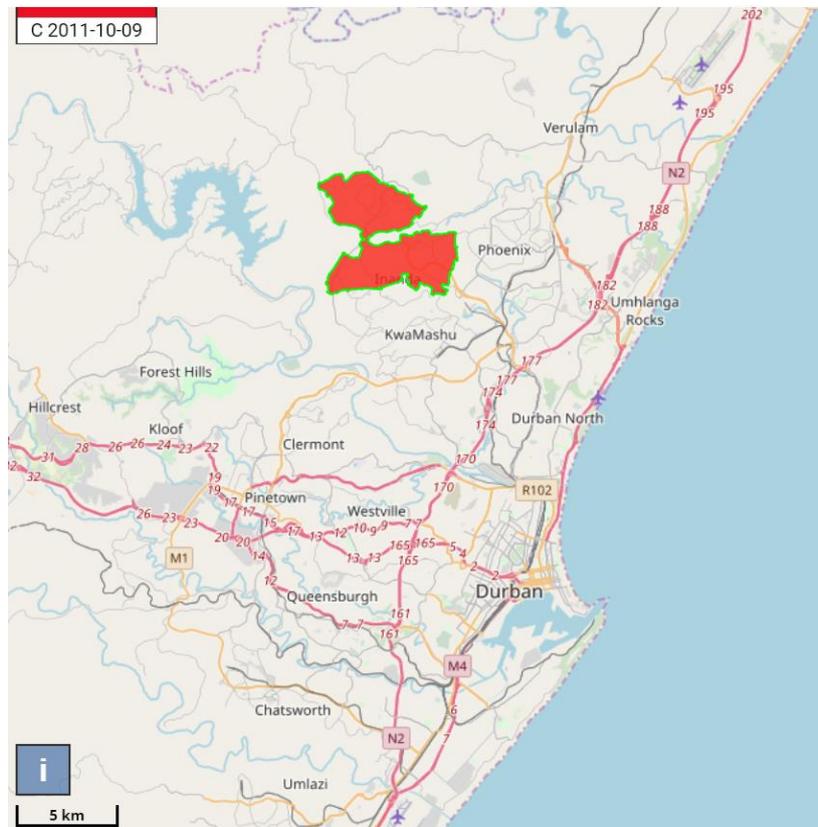


Figure 4-4 Location of Inanda in relation to Durban

Source: OpenMaps

Unlike the ethnically diverse sites based in Gauteng, Kwa-Zulu Natal is the land of the Zulu's and thus isiZulu is the most widely spoken language (See Table 4-3). Due to the prominence of isiZulu, the English of participants was lower than in other regions and more translation was needed.¹⁷⁰

The CTC venue in Inanda was unique in that it was a computer training centre designed for people with disabilities. This meant that this site had a higher proportion of people with disabilities. Although unplanned for, this difference enriched the data as it included the voices of those with disabilities.

Figure 4-5 shows one of the participants who had a disability and was thus using crutches.

¹⁷⁰ Staff and research assistants were able to help with this, and my basic understanding of isiZulu proved crucial.

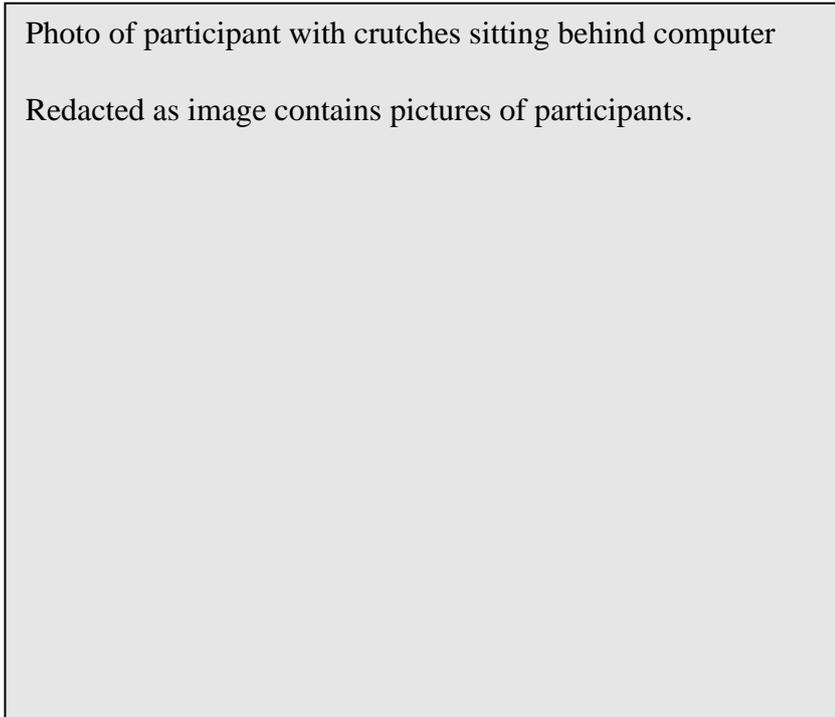


Figure 4-5 Participant with disability using crutches

Source: Author's own

Figure 4-6 shows the venue used in Inanda.¹⁷¹

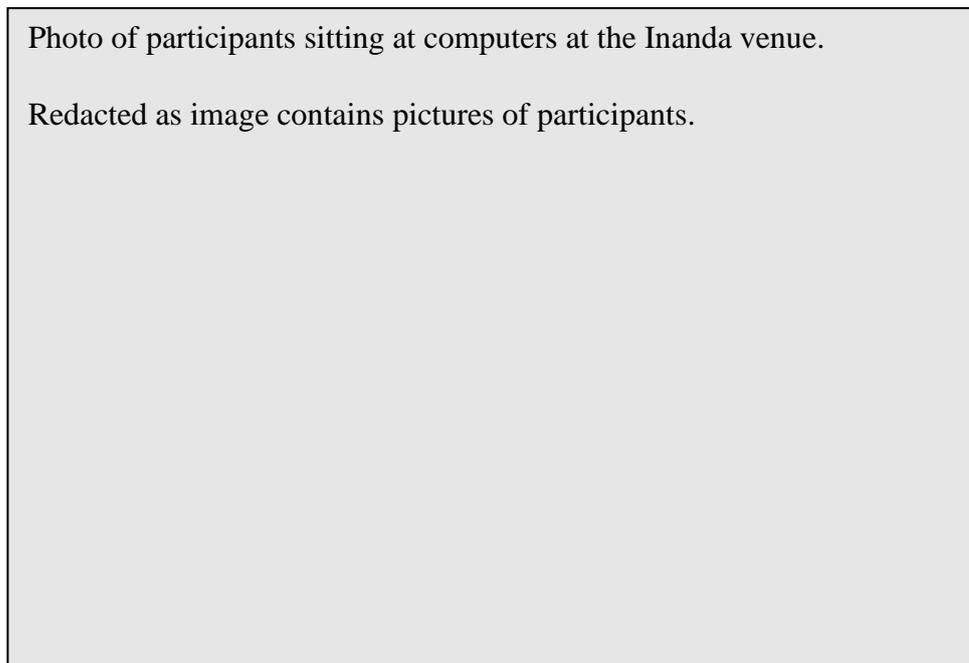


Figure 4-6 Inanda venue

Source: Author's own

¹⁷¹ It is not visible in the picture, but the back row had computers that were adapted to special needs.

4.6.1.3 Mankweng

Figure 4-7 shows the location of Mankweng in relation to Polokwane.

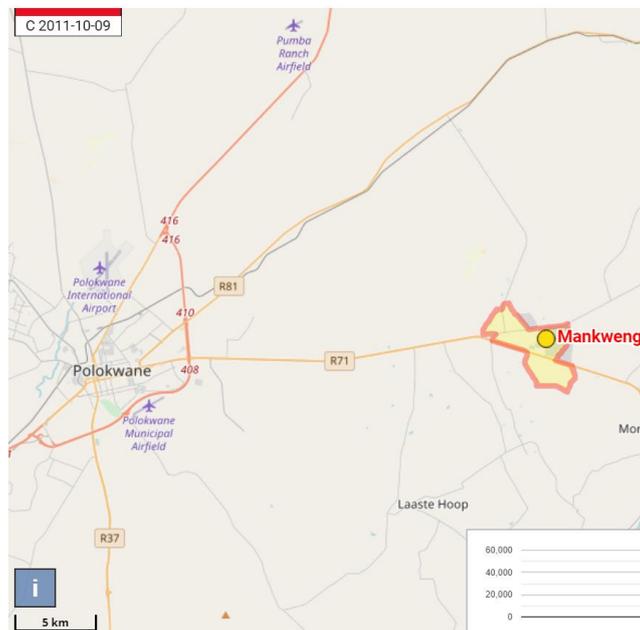


Figure 4-7 Location of Mankweng in relation to Polokwane

Source: OpenMaps

As can be seen, the area is less developed than the other sites, as Polokwane is a much smaller city. Mankweng is unique as, although it is much more rural than the other sites, it is the home of The University of Limpopo, a historically-black university. Figure 4-8 shows the scene outside the university entrance, with goats and informal settlements just across the road.

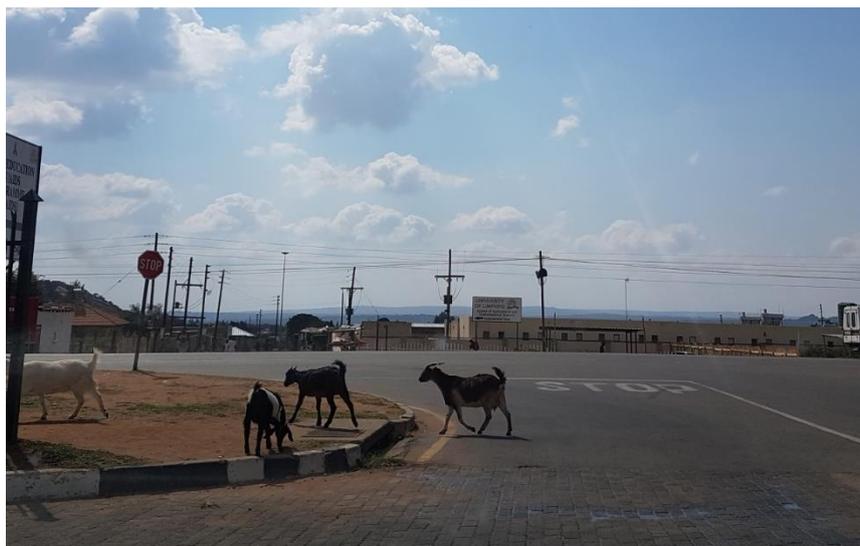


Figure 4-8 Ambiance outside the entrance of University of Limpopo

Source: Author's own

The CTC that was offered in Mankweng , seen in Figure 4-9, was located within the university. Thus, participants at this site tended to have more formal education than at others.¹⁷² In this region, the major language spoken is Northern Sotho (See Table 4-3).¹⁷³ Conducting the study at the university was useful in that it was a well-kitted safe space, however it brought its own difficulties such as needing usernames and passwords to access computers, and restrictions on the use of YouTube which limited some of the functionality of the course.

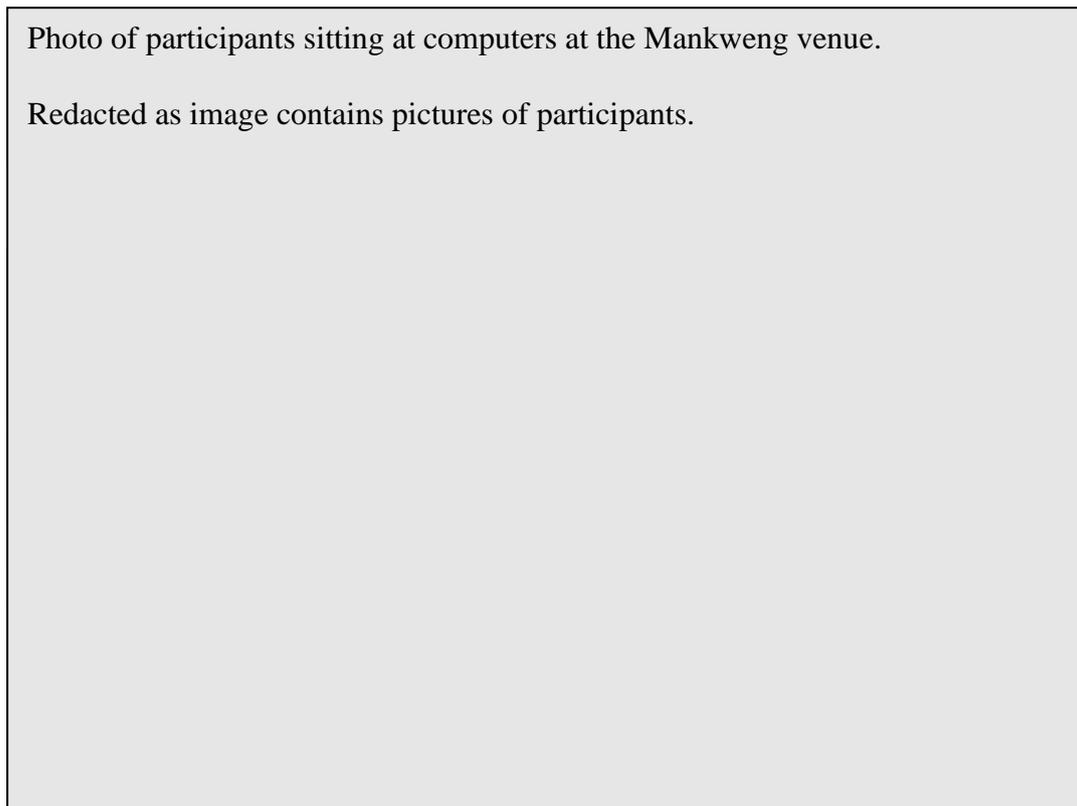


Figure 4-9 Mankweng venue

Source: Author's own

¹⁷² Whilst the online course was meant to be aimed at those not in university, it was hard to control against university students partaking in it.

¹⁷³ Due to the proximity to the university, English was more commonly understood which was beneficial as I have no basic understanding of Northern Sotho.

4.6.1.4 Ivory Park

Figure 4-10 shows the location of Ivory Park in relation to Johannesburg.¹⁷⁴

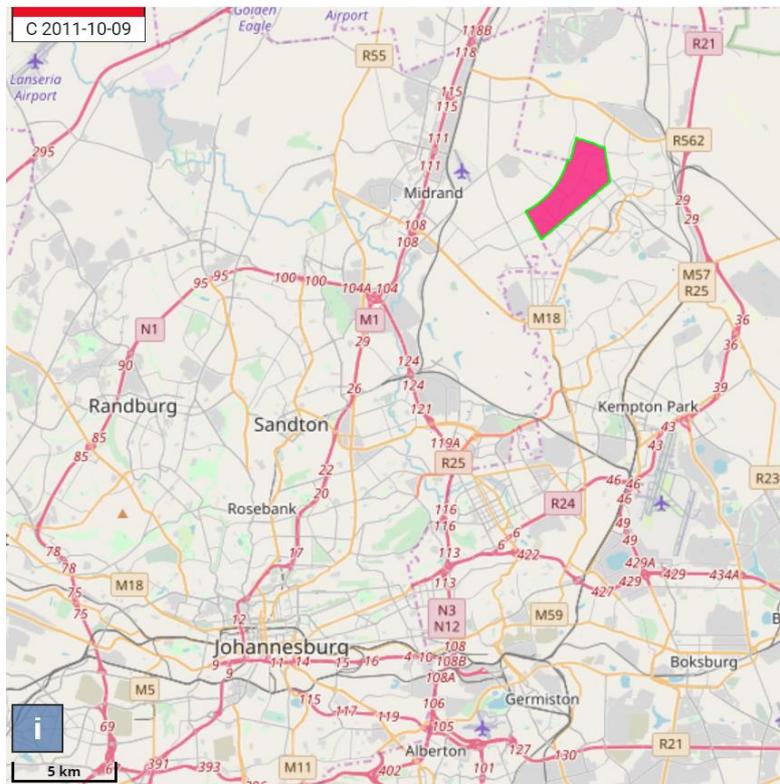


Figure 4-10 Location of Ivory Park in relation to Johannesburg

Source: OpenMaps

Due to its proximity to Johannesburg, it is home to people with diverse African ethnic backgrounds. This can be seen in the languages shown in Table 4-3. The Ivory Park CTC was located on the premises of a police station and a fire station, and thus proved to be a very safe location for both myself and the participants.¹⁷⁵ Due to the safe location, efficiency of staff,¹⁷⁶ internet access, availability of cost-efficient lunch options, and streams of potential participants from the area, the online course was run more times at this venue than any other.

¹⁷⁴ Ivory Park borders another township, Tembisa, which makes the area appear as one huge township.

¹⁷⁵ As ICT is sought after, break-ins happen quite often at ICT centres, and this location mitigated against that problem.

¹⁷⁶ Ivory Park was the most efficient of all the centres. The assistants at the centre were very keen to use the online course afterwards and asked me to write a trouble shooting document for them to continue using the course while I was gone.

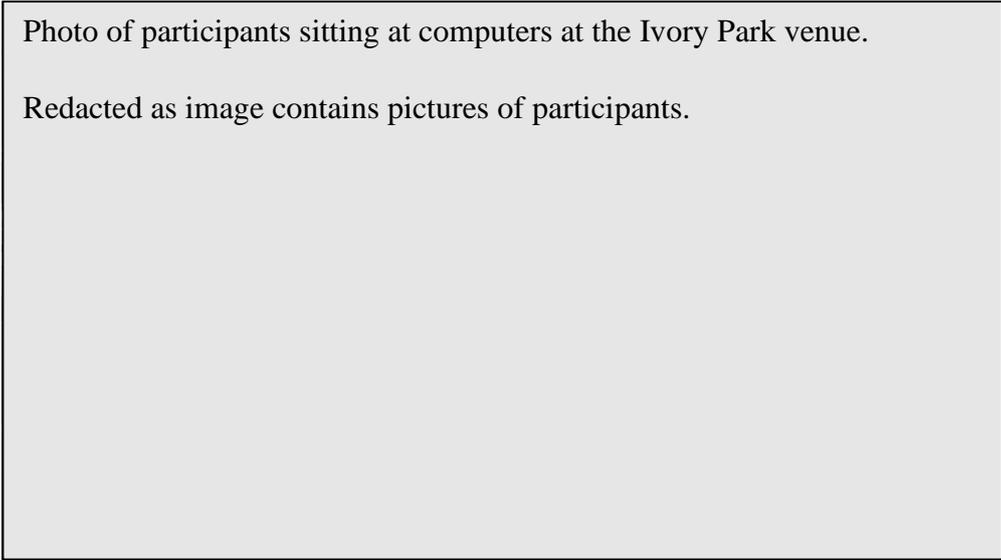


Figure 4-11 Ivory Park venue

Source: Author's own

4.6.1.5 Umgababa South

Figure 4-12 shows the location of Umgababa South in relation to Durban.¹⁷⁷

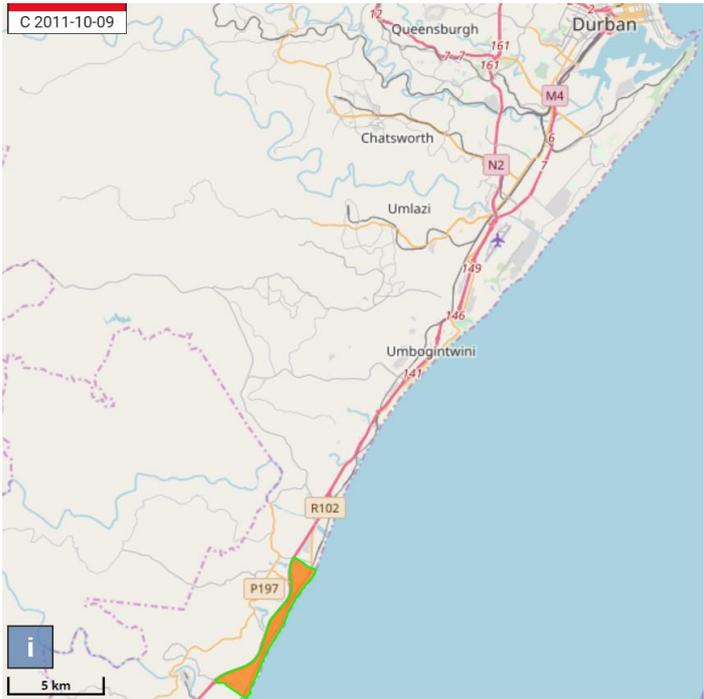


Figure 4-12 Location of Umgababa in relation to Durban

Source: OpenMaps

¹⁷⁷ As the Inanda venue was not available in the time of fieldwork, Siyafunda offered me a CTC in Umgababa. Located along the coast, it is far more scenic than the other sites, despite the socio-economic conditions that persist.

The Umgababa site was added as I wanted to balance out the dominance of the sites located in Gauteng.¹⁷⁸ Similar to Inanda, Umgababa had a high dominance of isiZulu speakers as can be seen in Table 4-3.

The Umgababa CTC was located in a municipality centre where the ward councillor is based. This site needed the most improvisation. The CTC ended up being double booked but the ward councillor, for political reasons, did not want me to cancel the course as the participants were there and were promised a course.¹⁷⁹ Thus, I was forced to improvise, and it worked surprisingly well. As most participants had mobile phones (and I had brought a Wi-Fi router), we did the surveys and the course primarily from mobile phones.¹⁸⁰ Various problems arose such as phones not having enough memory space or battery life, however, overall the mobile phone experiment proved successful. When desktops later became available, participants opted to continue on their mobile phones as they were more comfortable with their phones than desktops.¹⁸¹ Figure 4-13 shows the empty hall in which the participants did the course on their phones and Figure 4-14 shows the original venue.

¹⁷⁸ This was because language and ethnicity play a big role in relevance. Gauteng is an outlier in its ethnic diversity as other provinces are more homogenous.

¹⁷⁹ Cancelling the course would make the participants disgruntled and cost him votes.

¹⁸⁰ The course platform had built-in capacity for mobile use, however it had not been tested.

¹⁸¹ Those whose mobile phones had died by the afternoon continued on the desktops.

Photo of participants sitting in empty hall at the Umgababa venue.

Redacted as image contains pictures of participants.

Figure 4-13 Empty community hall where the online course was run

Source: Author's own

Photo of participants sitting at computers at the Umgababa venue.

Redacted as image contains pictures of participants.

Figure 4-14 Umgababa venue that was double booked

Source: Author's own

4.6.2 Participant Selection

An example of the Khwela posters used to advertise the course is given in Figure 4-15. This poster was sent to the Siyafunda CTC staff, who, through WhatsApp and word of mouth, advertised the courses in the community.¹⁸²

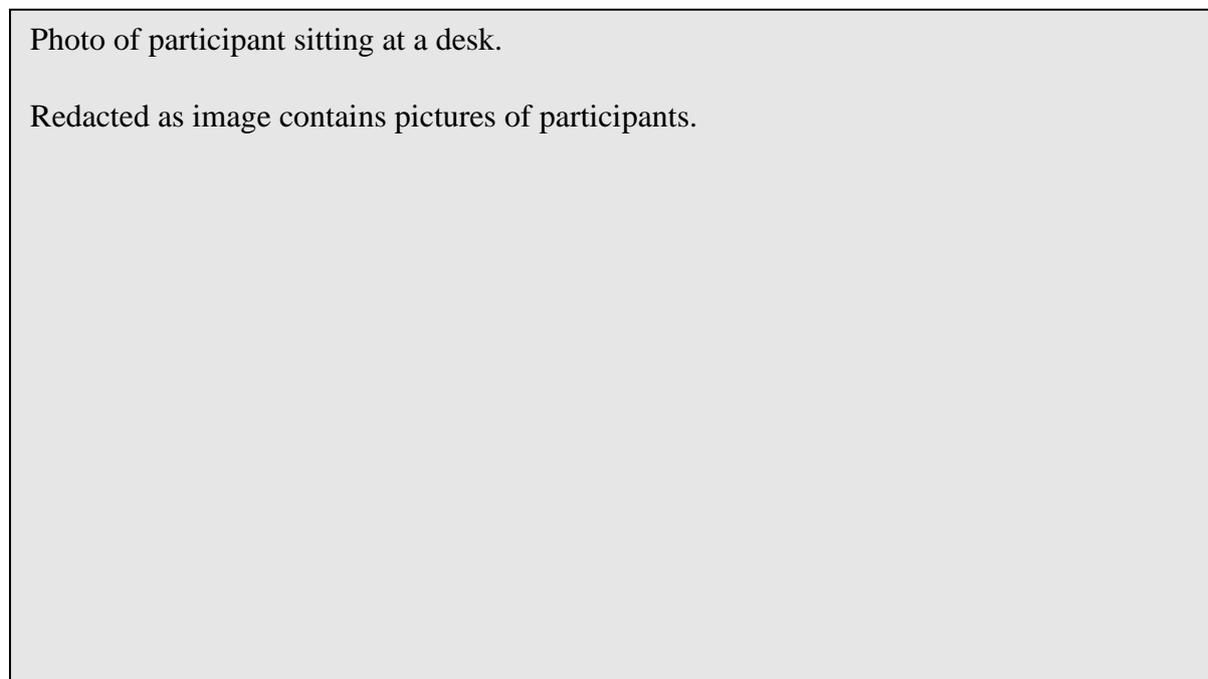


Figure 4-15 Poster used to advertise the course

Source: Khwela

Since the study focused on marginalised groups, it needed to be ensured that the participants indeed came from marginalised contexts. As the study was being conducted in historically black peri-urban areas, it was likely that the participants would predominantly be from low socio-economic backgrounds, have low education levels and experienced other intersectional disadvantages, that would define them as ‘marginalised’.¹⁸³ These factors were later verified in the surveys to ensure that participants did fit this description (Section 4.6.3). As Khwela targets unemployed youth, two further criteria were stipulated: that the participants be unemployed/underemployed and youth (under 35).¹⁸⁴

¹⁸² MOOCs or the fact that the course would be run online, was not mentioned in the advert. It was a concern that mainly those who studied at the CTC would attend, skewing the data to tech-savvy participants, however observations of many participants struggling to use a computer, showed that this was not the case.

¹⁸³ Furthermore, by responding to the advert and attending the course, participants were deemed ‘aspirational’ in some way, as opposed to others in the community who might be ‘discouraged’ and uninterested in pursuing work or further studies.

¹⁸⁴ These additional criteria helped to ensure that the participants were indeed marginalised. I was part of this decision in my capacity as co-founder. As the stipulation complimented the research study, there was no conflict in my roles as PhD researcher and co-founder.

4.6.3 Participant Demographics

This section highlights important demographics about the participants, drawn from the surveys¹⁸⁵, that is referred to in subsequent chapters. Table 4-4 shows the sample size and demographics of participants at each site. This table can be compared to Table 4-3 which shows the general demographics of each research site region.

Table 4-4 Demographics of participants at the five sites

Sample Demographics	Cosmo City	Inanda	Mankweng	Ivory Park	Umgababa
Province	Gauteng	Kwa-Zulu Natal	Limpopo	Gauteng	Kwa-Zulu Natal
Nearest Main City	Johannesburg	Durban	Polokwane	Johannesburg	Durban
Sample Size	45	36	35	87	47
Gender (%)					
Male	13.33	16.67	45.71	11.49	31.91
Female	86.67	83.33	54.29	88.51	68.09
Race (%)					
Black African	100.00	100.00	100.00	98.85	95.74
White	0.00	0.00	0.00	0.00	0.00
Asian	0.00	0.00	0.00	0.00	0.00
Coloured	0.00	0.00	0.00	1.15	4.26
Other group	0.00	0.00	0.00	0.00	0.00
Language (%)					
isiZulu	17.78	91.67	0.00	14.94	93.62
isiXhosa	0.00	8.33	0.00	10.34	2.13
Afrikaans	0.00	0.00	0.00	0.00	0.00
English	11.11	0.00	0.00	2.30	4.26
Northern Sotho (Sepedi)	15.56	0.00	62.86	27.59	0.00
Setswana	20.00	0.00	2.89	4.60	0.00
Sesotho	11.11	0.00	22.86	8.05	0.00
Xitsonga	8.89	0.00	2.86	22.99	0.00
Tshivenda	6.67	0.00	5.71	4.60	0.00
isiNdebele	6.67	0.00	0.00	1.15	0.00
Sign Language	0.00	0.00	0.00	0.00	0.00
Other language	2.22	0.00	2.86	1.45	0.00

Source: Author's own

The participant pool in Table 4-4 correlates with the population demographics of the research locations in Table 4-3, and is deemed a representative sample of the population, except in the

¹⁸⁵ The surveys will be explained in Section 4.6.5. The surveys drawn upon to present the demographics are the Background Survey and the Education and Employment Survey.

case of gender. In every site, there were considerably more female participants.¹⁸⁶ Whilst this skews the data, it may indicate that females are more aspirational in wanting to attend the course and/or have a greater likelihood of being unemployed.¹⁸⁷ The correlation with language can best be seen graphically in Figure 4-16 and Figure 4-17.

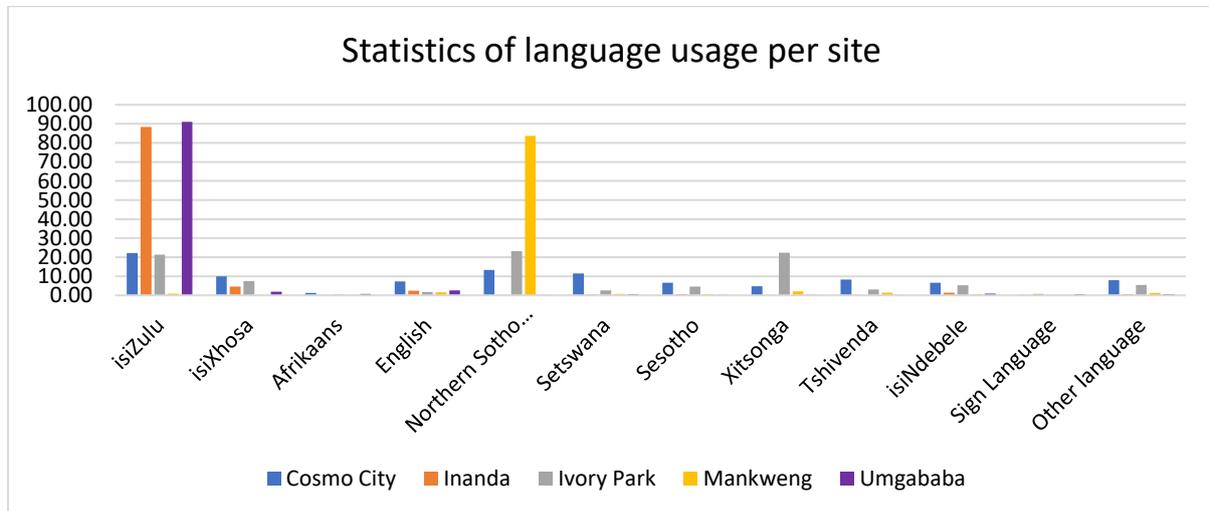


Figure 4-16 Statistics of language usage per site

Source: Author's own

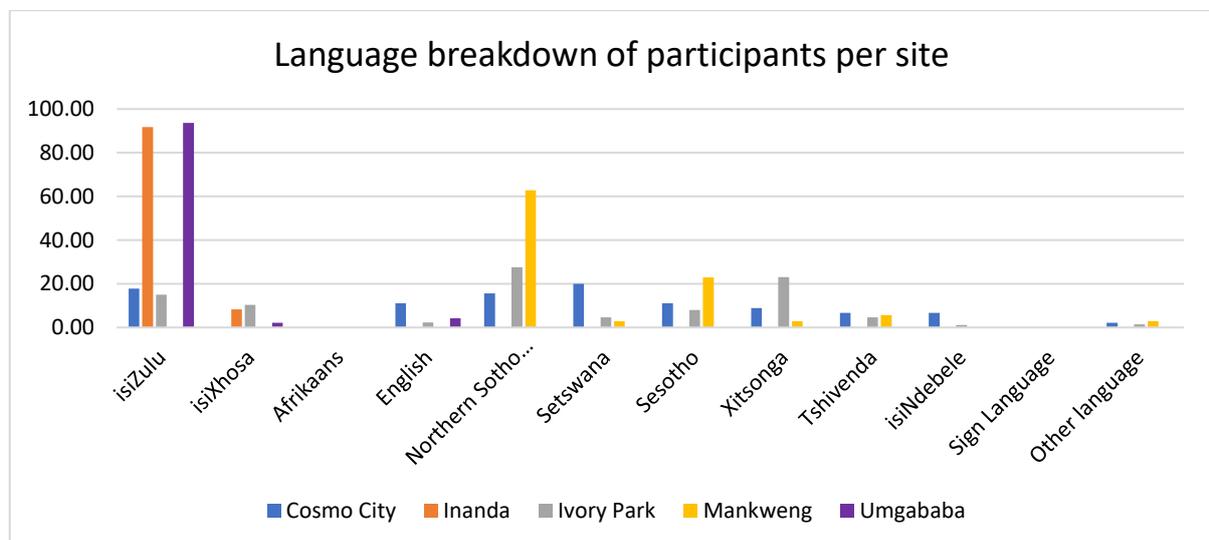


Figure 4-17 Language breakdown of participants per site

Source: Author's own

¹⁸⁶ Gender was not an aspect that was controlled for in the selection process and so the dominance of female participants happened organically.

¹⁸⁷ Participants were asked why there were so few men and three answers were given: 1.) many men are involved in drugs, 2.) the men are not interested in attending such a course, 3.) the men are working and cannot attend the course. This phenomenon alone needs further research but is beyond the scope of this research. It should also be noted that the courses were run on weekdays so those underemployed would not have been able to attend. However, the target was unemployed youth, so this was not a limitation of the research.

One slight deviance within the two graphs is the split between Northern Sotho and Sesotho in Mankweng.¹⁸⁸ What was also gathered from the survey data was that most of the participants second language was English, and not another African language. This can be seen in Figure 4-18.¹⁸⁹

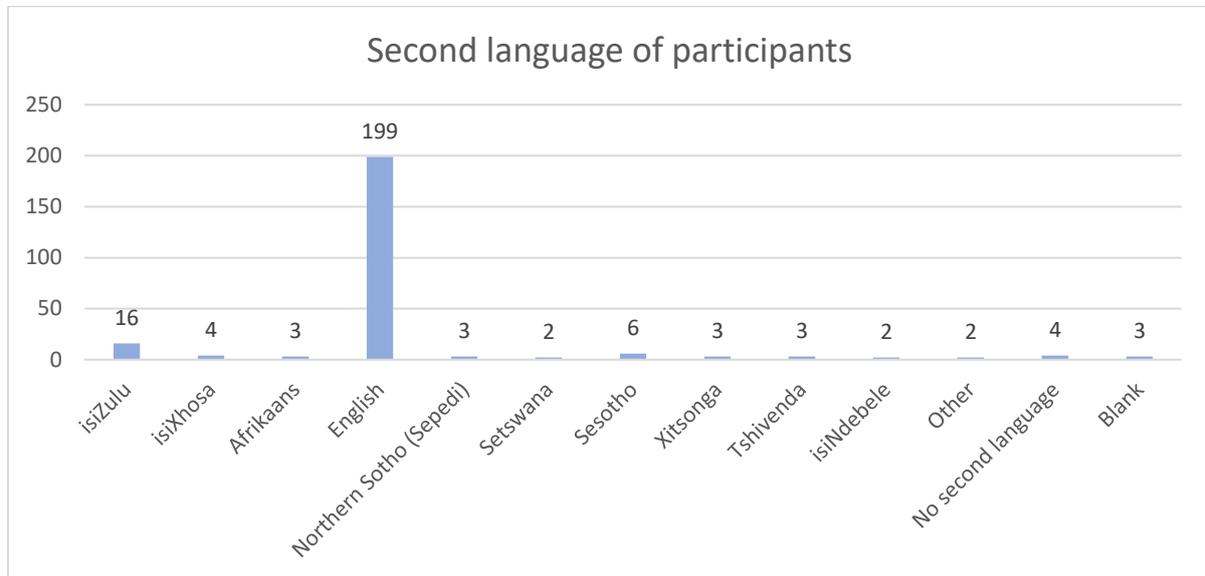


Figure 4-18 Second language of participants

Source: Author's own

Figure 4-19 shows the age distribution of the participants.¹⁹⁰

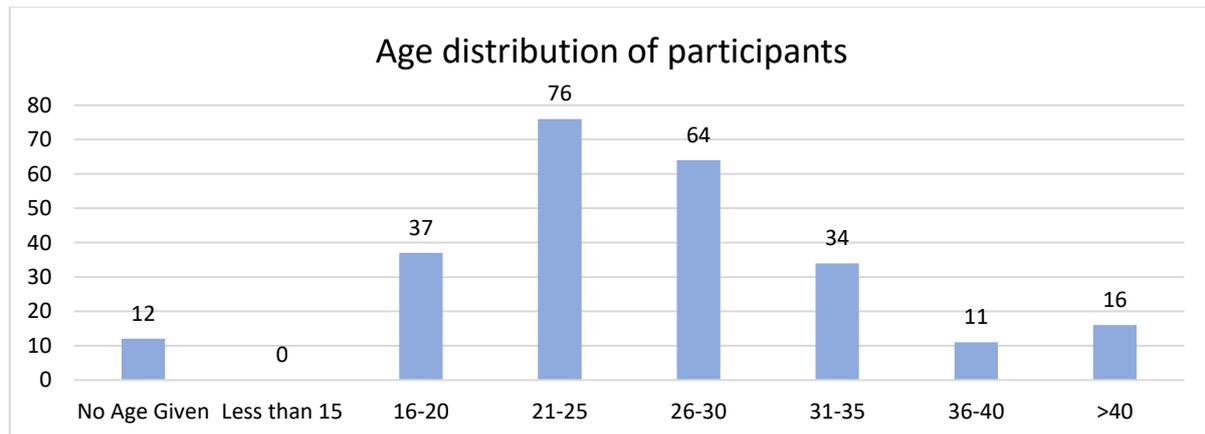


Figure 4-19 Age distribution of participants

¹⁸⁸ This could have been a problem of data collection as people in Mankweng identify as Pedi and refer to their language as Sepedi (a dialect of Northern Sotho), whereas the survey used the term Northern Sotho, which they might not have been familiar with.

¹⁸⁹ When data is aggregated across the sites, it is because there was no significant difference between sites, and the information is better understood in aggregation.

¹⁹⁰ As mentioned earlier, the study was mainly directed at youth. However, it was not practically possible to turn someone away because they were older than 35.

Source: Author's own

Figure 4-20 shows the religious breakdown where 90% of participants indicated that they were part of a religious groups.¹⁹¹ Christianity and the Zionist Christian Church (ZCC)¹⁹² were the most popular of religions.¹⁹³

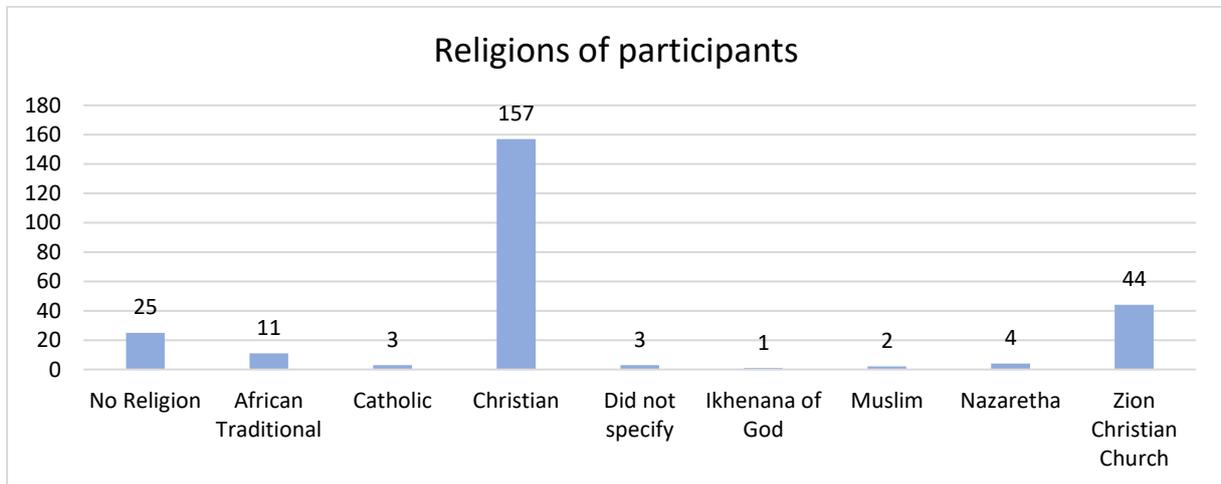


Figure 4-20 Religion of participants

Source: Author's own

Participants were asked who they were raised by, and the number of participants raised by single mothers is particularly high at 42.80% as can be seen in Figure 4-21.¹⁹⁴

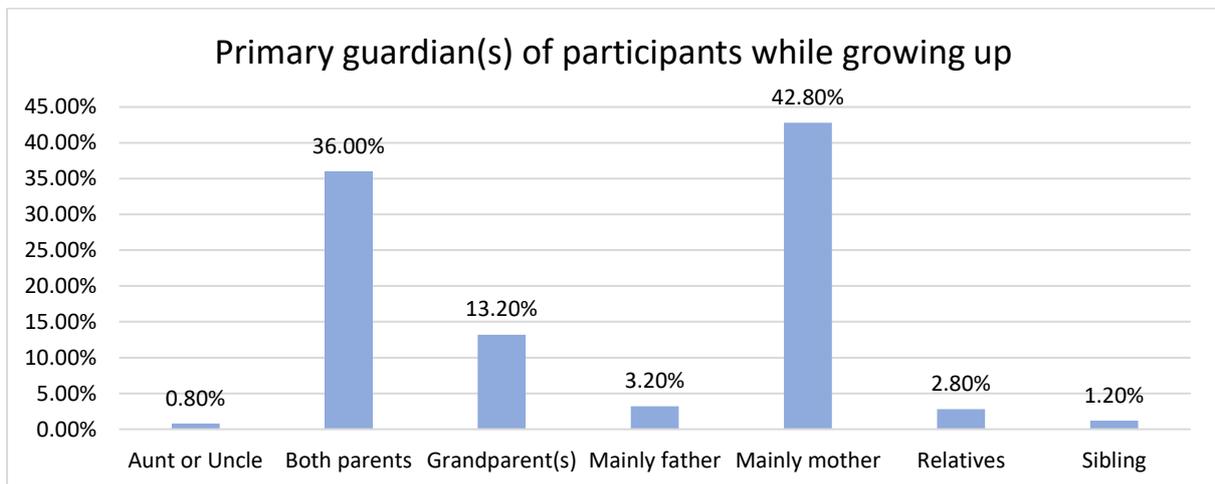


Figure 4-21 Primary guardian(s) of participants while growing up

¹⁹¹ Religion is important to note as Chapter 5 will touch on how religion links to their hope, faith, wellbeing and aspirations.

¹⁹² This is unrelated to Zionism in terms of a Jewish Nation State.

¹⁹³ ZCC, Ikhenana of God, and Nazaretha are all religions that merge African traditions with Christianity in some way (Cabrita 2014).

¹⁹⁴ This correlates with national statistics from the 2017 General Household Survey which states that 43.1% of children lived with their mothers only (Caxton Central 2019).

Source: Author's own

The number of children that participants have was matched to their relationship status, and it showed that 40.8% of the participants were single and parents.¹⁹⁵ This can be seen in Figure 4-22.¹⁹⁶

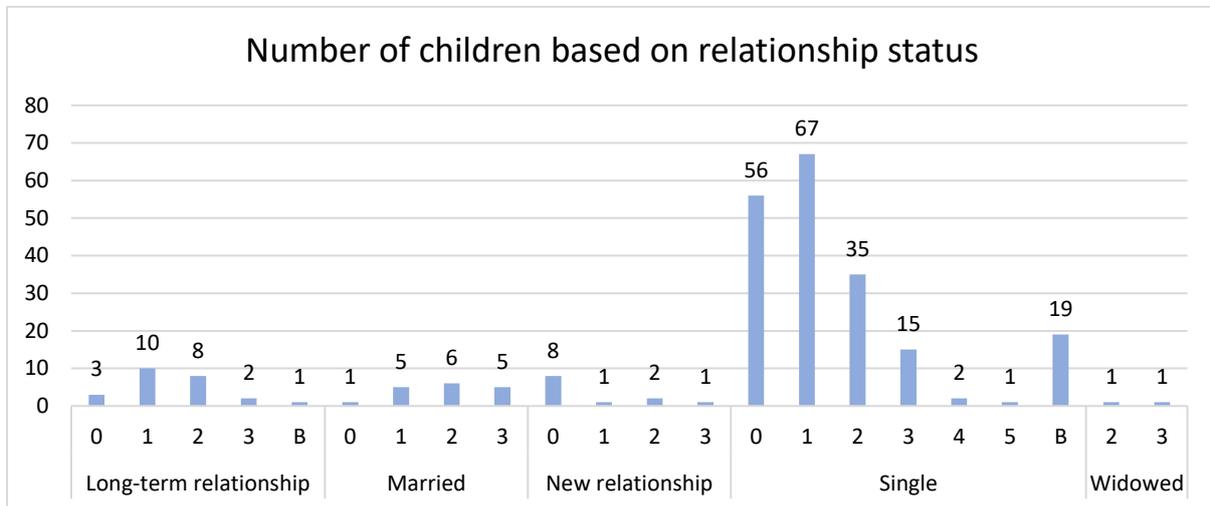


Figure 4-22 Number of children based on relationship status

Source: Author's own

Figure 4-23 shows the participants educational levels. 19.21% of participants have continued with further education after high school.¹⁹⁷ This percentage is higher than normal due to the Mankweng site having a large number of university students.¹⁹⁸

¹⁹⁵ This further confirms that the participants experience intersectional disadvantages. While it is true that a child is raised by the community in these areas in terms of care-giving, when it comes to daily necessities, it is hard for a single parent to provide for his/her children in terms of getting them access to education and other financial needs.

¹⁹⁶ 'B' refers to a blank response where a relationship status was indicated but number of children was not indicated.

¹⁹⁷ Undergraduate refers to those both pursuing undergraduate studies and completed undergraduate studies.

¹⁹⁸ At Mankweng, everybody had completed high school (Matric) and 30.56% were pursuing further studies, some even honours degrees. The national average for black students going on to *achieve* a bachelor's degree after *completing* matric is around 5% (Maluleke 2019).

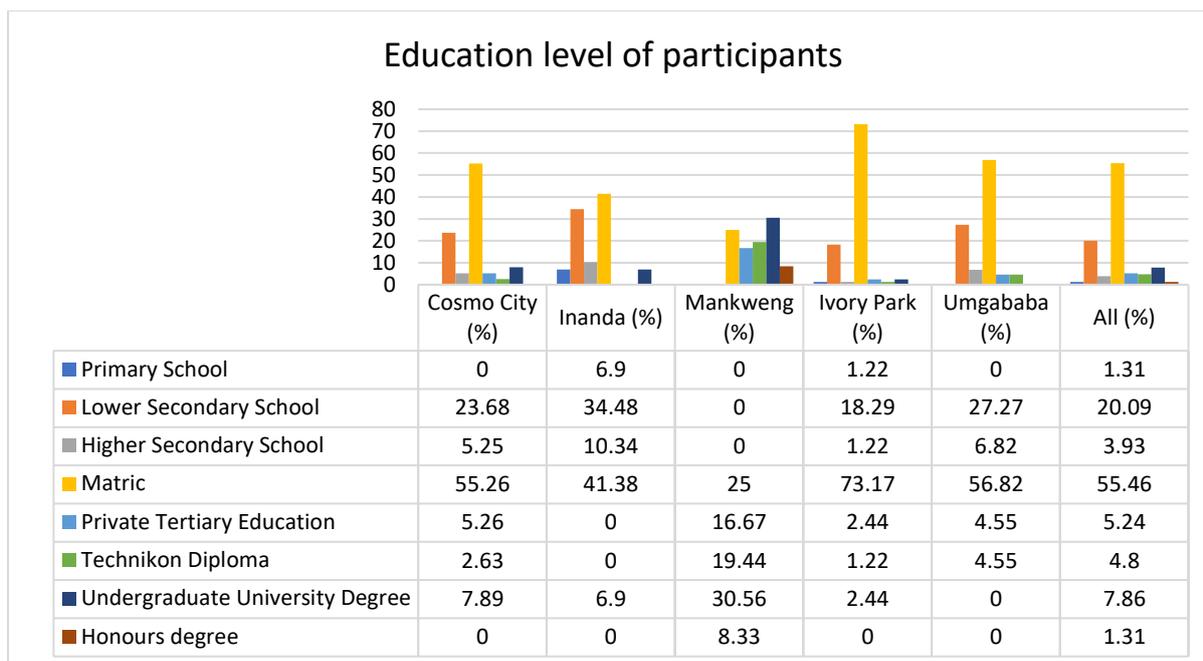


Figure 4-23 Education level of participants

Source: Author's own

Figure 4-24 shows the employment status of the participants.¹⁹⁹ The 43.91% unemployment rate of participants aligns with the youth (15-34) unemployment rate of 39.6% of the country (Statistics South Africa 2019), and may be higher considering the study was targeted at those seeking job opportunities.

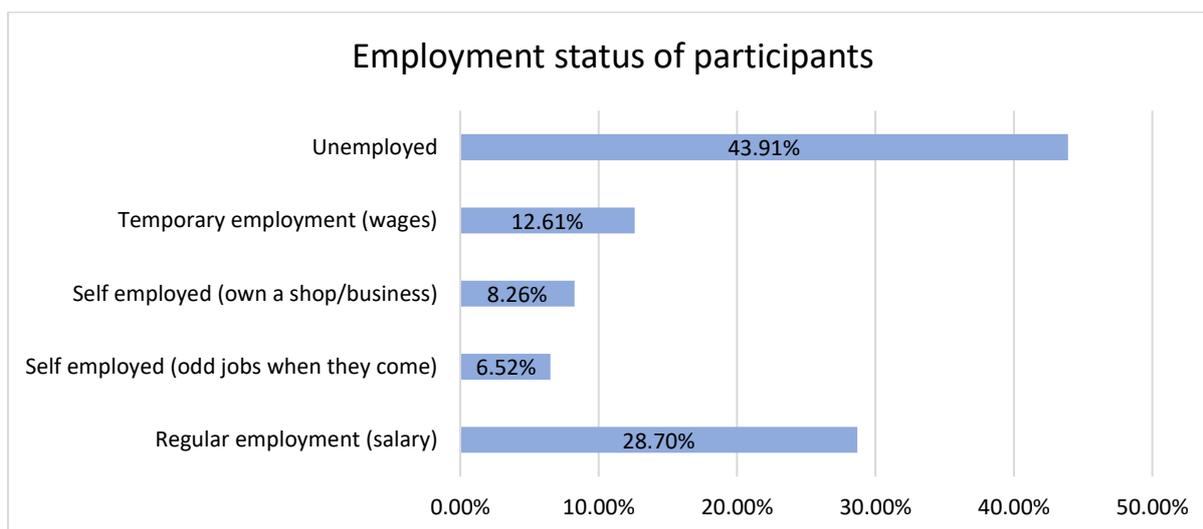


Figure 4-24 Employment status of participants

Source: Author's own

¹⁹⁹ A shortfall in the survey question was that housewife/child-rearer/caregiver was not on the list. This was aptly brought to my attention by a participant in Phase 3, but unfortunately was too late to change.

4.6.4 Regional beta online course

The regional beta online course was done in conjunction with Khwela, a social venture which aims to provide marginalised groups in South Africa with access to online courses in order to educate and empower them, and moreover to assist them in finding employment. As I am one of the co-founders of Khwela,²⁰⁰ I was able to merge the research objectives of the PhD and the beta testing of Khwela's online course to maximise on funding resources. The partnership with Khwela was mutually beneficial. The Khwela team supported my PhD research by helping to design the course, supplementing funding for the study, and assisting in fieldwork. Khwela, as a social venture, benefitted from my knowledge and expertise of implementing edtech in low-income regions as well as my research skills in collecting data, processing and analysing it in order to provide recommendations for improving the course.

The course was designed on the WordPress Learning Management System (LMS) called LearnDash.²⁰¹ As the course was designed with under-resourced contexts in mind, content was predominantly in the form of text and pictures, with a few short optional videos.²⁰² The course was free to access²⁰³ online but was not advertised beyond the scope of the research.²⁰⁴

The study consisted of full-day course with participants. The participants were informed and prepared by the local staff that this was a study for Khwela. At the beginning of each full-day course, I explained research project verbally,²⁰⁵ highlighting that data will be collected in order to design courses that better suit their needs and contexts. It was explained that by signing up to the course platform and partaking in the beta online course and embedded surveys, they were consenting for their data to be used. This was then explained again in written form at the

²⁰⁰ The Khwela team consisted of myself and Sandiso Sibisi, the other co-founder. Additionally, we had various volunteers and assistants who assisted at different stages.

²⁰¹ This was chosen by Khwela because it was a ready-made platform that was easy to use and the other co-founder, Sandiso Sibisi, was already familiar with it. An LMS was chosen, rather than creating an app, as financial resources, skills and time was limited, and the study was meant to gather data to inform the design of an app or website that would best suit the needs of the marginalised groups. LearnDash scales to be useable on computers, tablets and mobile phones, which proved more useful than imagined. The platform had some drawbacks for use in this context, such as inability to work offline, but was deemed overall acceptable.

²⁰² Zulu voice-overs were added to the videos before going to Kwa-Zulu Natal to test whether participants would appreciate this.

²⁰³ I would not term it open as it needed a user account to access it.

²⁰⁴ It was not advertised as it is quite rugged; the intention was to build a proper platform from the findings of the study.

²⁰⁵ It was crucial to explain the research verbally as participants may not have fully understood what they are signing up for on the online course as they are already unfamiliar with this concept.

beginning of the survey section in the course.²⁰⁶ The beta online course was called ‘Basic Career Development’.²⁰⁷ The programme for the full day course can be seen in Figure 4-25.



educating and empowering the unemployed to work tomorrow

Khwela Pilot Programme - Inanda

8:00 - 9:00	Participants arrive and set up accounts
9:00 - 9:15	Course Introduction
9:15 - 10:45	Complete Surveys
	Background Survey - 5 min
	Wellbeing Survey - 30 min
	Finance Survey - 5 min
	Technology Survey - 15 min
	Education and Employment Survey - 15 min
	Educational Opinions Survey - 15 min
10:45 - 11:00	Tea Break
11:00 - 12:00	You - Self Assessment
12:00 - 12:30	Lets see what you know already! (Baseline testing)
12:30 - 13:00	
	CV Writing - Persuasive CV Process
13:00 - 13:45	Lunch
13:45 - 15:45	
	13:45 - 14:15 CV Writing - CV Standards and Formats
	14:15 - 14:45 CV Writing - Accomplishment Statements
	14:45 - 15:45 CV Writing - Customising your CV
15:45 - 16:00	Tea Break
16:00 - 16:20	Summary (Discussing what we learnt throughout the day)
16:20 - 16:40	Lets see what you have learnt! (Endline testing)
16:40 - 17:00	Feedback Survey

Figure 4-25 Full day course programme

Source: Author’s own

Prior to the course design, a human-centred design workshop was held by Khwela with marginalised youth to ensure views of marginalised youth were incorporated into the course design from inception. Details will not be expanded on here due to brevity, but pictures of the workshop can be seen in Figure 4-26 and Figure 4-27 .

²⁰⁶ The dual process of verbal and written explanations were a double measure to ensure that participants understood that data was being collected for research purposes.

²⁰⁷ The course was an amalgamation of career development information from Indiana University (USA) and the University of Cambridge (UK), with permission from both universities to re-use their content. The content was modified and adapted to South African needs and contexts, and specifically the education levels and types of jobs the participants were likely to be applying for. Overall, it took about two weeks to design and create the online course. Prior to this, time was spent reviewing and taking MOOCs, in order to get a feel of what an online course should be like. In addition, literature on MOOCs for developing country contexts was reviewed.

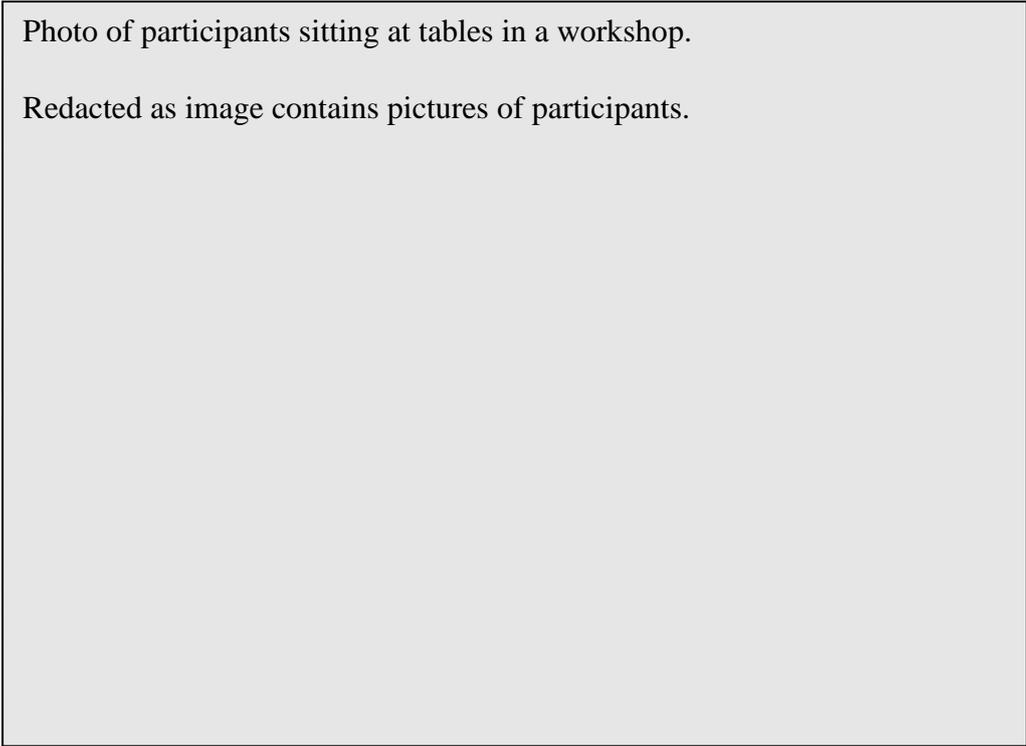


Figure 4-26 Human-centred design workshop informing design of the Khwela platform and content

Source: Author's own

Career Development Education	Mentorship	Other Youth Programmes	Employment
<ul style="list-style-type: none"> * Don't limit to an app. * No data * No Smartphone * No data * No monthly income * Reach the gap. * Workshop on how to budget. * Savings. 	<ul style="list-style-type: none"> Δ Job shadowing Δ Internship 	<ul style="list-style-type: none"> Δ Start other nearby branches. Δ ccc notice boards. Δ community newspapers. Δ Road show 	<ul style="list-style-type: none"> * Preparation for interviews

Figure 4-27 Example of feedback from design workshop participants

Source: Author's own

Figure 4-28 shows the full outline of the course in the navigation panel, and how the course home page appears. Figure 4-29 and Figure 4-30 show examples of the content of the online career development course.

Kh
Khwela
educating and empowering the unemployed to work tomorrow

About Career Development Mentorship Login Employment Workshops

Education For Sustainable Development

Basic Career Development

Posted on March 19, 2017 by sandisos

Course Status: Completed

Job searching can be a daunting process, but can also be rewarding and energizing if one can allow it to be. The basic career development course, guides job seekers with three of the basic tools for finding a job namely; a curricula vitae, cover letter, and interview strategies.

Prospective employers often know you only as a CV and a cover letter. These documents must argue for you in your absence and somehow, convince their reader that you can do a particular job very well. You are lucky if an employer spends more than 20 seconds reading your CV, therefore it needs to be easy to read and grab their attention in a positive light.

Learning Objectives:

- Understand the purpose of a CV and how it can be used as a customized personal marketing tool
- Be able to apply the standards of professional language and communication and traditional CV formats
- Know how to write accomplishment statements that clearly and compellingly promote your strengths and skills

Course Materials

Note Book Pen

Course Content Expand All | Collapse All

Lessons	Status
1 Introduction	<input checked="" type="checkbox"/>
2 Let's see what you know already!	<input checked="" type="checkbox"/>
3 You	<input checked="" type="checkbox"/>
4 CV Writing	<input checked="" type="checkbox"/>
5 Feedback Survey	<input checked="" type="checkbox"/>

[Edit](#)

NAVIGATION

- Introduction
 - Background Survey
 - Well-Being Survey
 - Finance Survey
 - Technology Survey
 - Education and Employment Survey
 - Educational Opinions Survey
- Let's see what you know already!
 - Baseline Test: Let's see what you know already!
- You
 - Beliefs
 - Values
 - Personality
 - Personality: Multiple Choice Questions
 - Skills
 - Skills: Multiple Choice Questions
- CV Writing
 - Persuasive CV Writing
 - Persuasive CV Writing: Multiple Choice Questions
 - Persuasive CV Writing: Gather your raw material into an "everything" document
 - CV Standards
 - Standards and Formats: Multiple Choice Questions
 - CV Formats
 - Resume Standards: Multiple Choice Questions
 - CV Writing: CV Self Review
 - Customising your CV
 - Customising your CV: Link what you've done to the employer's needs
 - CV Examples
 - Endline Test: Let's test what you have learnt!
- Feedback Survey

Figure 4-28 Screenshot of course outline

Source: Khwela



Your values are aspects of work that are important to you. For example:

- o A flexible schedule
- o Doing work that helps others
- o Upward mobility
- o Lots of vacation time
- o Working with people I like
- o Treating people respectfully

These are just a few of many possible work values. Knowing your values helps answer the question “why do this work” and is essential for opening the door to a satisfying career. In fact people often leave a job or career because it doesn’t satisfy one or more of their values.

While some of your values may change as your life roles and circumstances change, many may remain consistent over your entire life. Values are also personal and the words we use to describe them may mean different things to us than others. Take the value of “success”. Many people want to achieve success but what

- Values
- Personality
 - Personality: Multiple Choice Questions
- Skills
 - Skills: Multiple Choice Questions
- ▶ CV Writing
- ▶ Feedback Survey

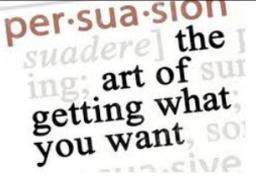
Return to [Basic Career Development](#)

PROGRESS



Figure 4-29 Example of ‘Values’ section of the course

Source: Khwela



Introduction

When writing any document, you must keep in mind the situation: To whom are you writing? Why are you writing? What words can you use to get what you want? You need to answer these these questions before you start:

- o Are writing to a potential employer?
- o Do you want this employer to hire you for a specific position?
- o What type of employee is the employer look for?

The purpose of the CV is to **convince the potential employer that your past experience proves that you can do the tasks required** for the present job or internship. If the resume succeeds, you will be offered an interview to prove it in person.

Think of your CV as a marketing tool. If it’s helpful to you, think of your resume as a **marketing device** with a single customer, the employer. Remember that marketing does not demand full disclosure. Your CV should include only the most relevant, persuasive information about yourself.

So what do employers find persuasive and relevant? The rest of the chapter will answer this at length, but the

- ▼ CV Writing
 - Persuasive CV Writing
 - Persuasive CV Writing: Multiple Choice Questions
 - Persuasive CV Writing: Gather your raw material into an “everything” document
 - CV Standards
 - Standards and Formats: Multiple Choice Questions
 - CV Formats
 - Resume Standards: Multiple Choice Questions
 - CV Writing: CV Self Review
 - Customising your CV
 - Customising your CV: Link what you’ve done to the employer’s needs
 - CV Examples
 - Endline Test: Let’s test what you have learnt!
- ▶ Feedback Survey

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PROGRESS



Figure 4-30 Example of the ‘Persuasive CV Writing’ section of the course

Source: Khwela

This thesis does not analyse the content of the course, but rather participants experiences of doing the course. However, the course content does intertwine with the research overall research, and where it is important to refer to the course content, it is mentioned.

4.6.5 Surveys

The surveys were Google forms, embedded into the online course, and were thus captured digitally which eased the data collection process. There were many shortfalls to this though; data was lost if the internet or power was cut,²⁰⁸ and participants who struggled with typing and English may have given shorter or unclear answers.²⁰⁹ A summary of the questions in the seven surveys can be found in Figure 4-31.

In all the surveys, perceptions are presented and not facts. In some questions that were purely subjective, like what brings one joy, this was not an issue. In other questions such as frequency of phone usage, a subjective, self-reported answer may differ from an actual measurement. Where data could be correlated or substantiated by regional or national statistics, such as mobile penetration, it has been. However, the purpose of surveys was to ascertain participants' *understandings*, thus more objective answers were of secondary importance.

²⁰⁸ Power or internet cuts happened at numerous times at all the venues. This frustrated many participants and contributed to large amounts of data being lost. The choice to collect survey information online was probably the biggest shortfall of the research.

²⁰⁹ The questions were all in English and participants were advised to ask for help if they didn't understand. They were also taught to Google the meaning of a word.

Background Survey	<ul style="list-style-type: none"> - Name, age, gender, race - Location and Languages spoken - Upbringing and family
Wellbeing Survey	<ul style="list-style-type: none"> - Sources of emotional and financial support - Sources of inspiration and motivation - Governments impact on quality of life - Disadvantages faced in life - Challenges and things going well in life - Medium and long term Life goals - Factors that bring joy - Factors contributing to a good, quality life
Financial Background Survey	<ul style="list-style-type: none"> - Description of household - Sources of financial support - Number and type of dependants - Employment status - Income per month - Expenses per month
Technology Survey	<ul style="list-style-type: none"> - Ownership or access to computer/ laptop - Access and quality of internet connectivity - Ownership or access to a mobile phone/smartphone - Frequency of usage of digital devices - Impact of digital technology on quality of life - Self assessed computer literacy levels - Need for digital technology in life
Education and Employment Survey	<ul style="list-style-type: none"> - If studying currently, description of current studies - Preferences on learning methods - Highest education level - If any, ambitions to further education - Opinions on whether education has/would help(ed) achieve ambitions and improve quality of life - Shortfalls in education thus far - Difficulties in finding jobs - Employment status
Educational Opinions Survey	<ul style="list-style-type: none"> - If any, impact of apartheid/colonialism on education, employment and life opportunities - Experiences, if any, of racial discrimination in ones education and in life in general - Opinions on exclusion/inclusion of race, culture and local/indigenous history in education - Opinions of westernisation in education - Accomodation of financial situation, family responsibilities, culture and faith in ones education - Relevance of education to ones real life - Opinions on preferred language of instruction and race of educators - Understanding of the term decolonisation
Feedback Survey	<ul style="list-style-type: none"> • Rating of features of the online course • Ease of navigations around the course • Quality and importance of facilitator • Suggestions and improvements • Preference on whether to include more videos • Course difficulty and meeting of expectations • Google form collection • Editing of surveys after phase one • Online course text heavy less videos • Course content usefulness and relevance to context • Preferences on interactivity and social networking at the course venue • Learning preferences with an online course • Interest in learning further online

Figure 4-31 Summary of themes in surveys

Source: Author's own

4.6.5.1 Survey Design

The surveys constructed for this research were based on the capability approach and sought to investigate what participants value and what they have reason to value, particularly regarding their education (Clark 2002, 2016; Clark and Hodgett 2007; Nussbaum 2006; Sen 1985b). The survey design was based on Clark's (2016) study which focused on measuring human values, in particular, values surrounding education in marginalised groups in South Africa.²¹⁰ Clark's (2007; 2001) survey questions that were useful to investigating the research questions were used, some were adapted, and others were left out.²¹¹

Clark's (2016) surveys have strongly been shaped by the Sen's (1987, 1992, 2009) work on forming the capability approach and Nussbaum's (2000, 2011) work on extending this to the *capabilities* approach, which in turn has also shaped the approach in this research. While Sen's work is often critiqued for being too individualistic, Clark's (2007; 2001) surveys, as well as the surveys in this research, have included community and political aspects in questions.

While this research aligns with Sen's approach of allowing people to define for themselves what the value, building upon previous work and lists of capabilities, particularly in education, was key to ensuring a robust survey design. Drawing on Clark's (2016) review of capability lists that had implications for his survey designs, he outlines Nussbaum's (2011:33–34) list of ten central capabilities²¹² as well as lists of Walker (2006)²¹³ and Wilson-Strydom (2016)²¹⁴ that focus more on education. These lists can be reviewed directly in their papers.

²¹⁰ The questions based on Clark's research were dispersed across the Background Survey, Financial Survey, Wellbeing Survey and Education and Employment survey. The Technology Survey used mostly new questions, as Clark had not investigated technology. However, it kept the same approach, focusing on determining the value and essentiality of technology in one's quality of life.

²¹¹ Clark (2016) draws on questions from 'The essentials of life' survey (Clark and Qizilbash 2001) and the 'Perceptions of Well-Being' questionnaire (Clark and Hodgett 2007). As repeating Clark's entire questionnaires would be a dissertation in itself, this research built upon some of the unique lists generated from his investigation of human values (Clark 2002; Clark and Qizilbash 2008), in addition to having open-ended questions that left room for new themes to arise.

²¹² Nussbaum's (2011:33–34) ten central capabilities include (1) life, (2) bodily health, (3) bodily integrity, (4) sense, imagination and thought, (5) emotions, (6) practical reason, (7) affiliation, (8) other species, (9) play and (10) control over one's environment.

²¹³ Walker's (2006) list of capabilities for higher education and life-long learning bear resemblance to Nussbaum's list. Walker (2006) links capabilities such as 'social relations and social networks', 'respect, dignity and recognition', 'emotional integrity, emotions' and 'bodily integrity' to education and learning (Clark 2016).

²¹⁴ Wilson-Strydom (2016) conducted a study with school and university students, whereby a top-down and bottom-up approach was used. She highlights seven capabilities for equitable transitions into university; (1) practical reason, (2) knowledge and imagination, (3) learning disposition, (4) social relations and social networks, (5) respect dignity and recognition, (6) emotional health and (7) language competence and confidence (Clark 2016).

Clark (2016) highlights that the lists which focus on higher education may not necessarily centre the needs of the poor or disadvantaged. Focusing on studies with more bottom-up approaches, he highlights the studies of Biggeri et al. (2006; 2011), Young (2009)²¹⁵ and Burchardt et al. (2009) which emphasise education as one of the most important aspects of children's wellbeing. Other works such as McLean and Walker (2012), Unterhalter (2003b) and Powell and McGrath (2014), which are conducted in South Africa, are of particular relevance to this study. These works, covering school and higher education, marginalised contexts, and South African as well as broader contexts, gave a general overview of the possible capabilities in the education domain.

One key difference between Clark's approach and mine was in conducting the surveys. Clark's (2007; 2001) surveys were intended to be done by an enumerator who engaged with the respondent, prompting, elaborating or clarifying the question.²¹⁶ While my typing-input approach lacked the benefits of this process, it had its own benefits as it avoided enumerator biasing or leading, and participants were open to write deeper and more truthful answers that they may not have been comfortable saying face-to-face to someone.²¹⁷

4.6.5.2 *Survey Processing*

Whilst over 336 participants partook in the study, the useable surveys were unfortunately considerably lower. In some cases, duplicate surveys were submitted, and in other cases, submissions were not received due to power outages or loss of internet connectivity at the moment of submission. With the concern for erratic connection in mind, a design decision had been made for each survey to be submitted separately (and thus more frequently), rather than one submission at the end of the 6 initial surveys. However, this made connecting the 7 surveys together more difficult.²¹⁸ In addition, matching across phases also needed to be done.²¹⁹ Figure 4-32 summarises the cleaning and merging process.

²¹⁵ There are four authors referenced in this research with the surname 'Young'. Marion Young (2009) draws lists of basic capabilities, basic learning outcomes, and learning thresholds which span across four general areas: functional life skills learning, cognitive life skills learning, interpersonal life skills learning and person life skills learning.

²¹⁶ Clarks (2016) surveys were built with a dialectical Socratic approach in mind.

²¹⁷ The space and the independence to complete the survey by themselves allowed for issues of abuse and discrimination to be raised as well as reflections on race, Apartheid and colonialism to be expressed more clearly.

²¹⁸ Email addresses were used as unique identifiers for each survey in order to concatenate the surveys, however participants sometimes misspelt their email addresses. This led to many unmatched surveys which limited data analysis for correlations *across* surveys.

²¹⁹ Whilst the surveys stayed largely the same, Phase 1 asked largely open-ended questions and Phase 2 and 3 had additional predefined options, with an 'other' option if the choice was not listed. This was extremely useful decision to aid data processing for the latter phases, but it meant that more effort was needed to match the surveys together from different phases together as the output format was different.

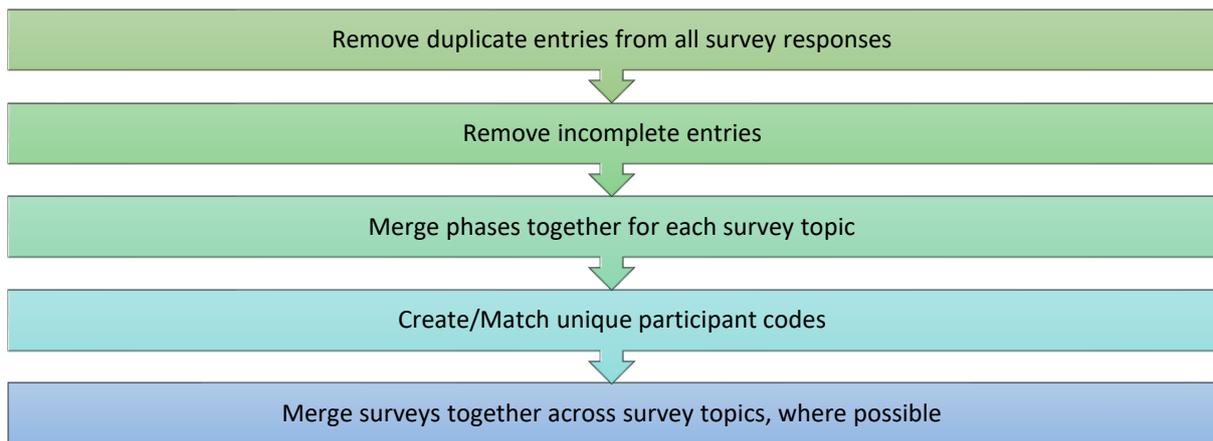


Figure 4-32 Survey cleaning and merging process

Source: Author's own

Table 4-5 shows the number of useable surveys after the cleaning process.²²⁰

Table 4-5 Number of useable surveys

Survey	Uncleaned	Cleaned
Background Survey	336	250
Wellbeing Survey	248	233
Financial Background Survey	263	238
Education and Employment Survey	247	231
Educational Opinions Survey	248	230
Technology Survey	270	235
Feedback Survey	244	212

Source: Author's own

4.6.5.3 Participant Coding

The coding in Figure 4-33 was used to give each participant a unique identifier that encompassed some of their demographic information. This was done to ensure that the context from which the participant spoke was captured in the code, while still protecting their identity.²²¹

²²⁰ Whenever percentages are given in this dissertation, the base number used to create that statistic depends on which survey the data comes from.

²²¹ In a few cases, the Background Survey was missing for a participant, and thus their code could not be created. However, their email address still verified them to be a unique entry and a short code such as P263 was given.

P	0	0	1	C	2	7	F	Z	U
Unique Identifier*				City	Age		Gender	Language	

City	
Cosmo City	C
Inanda	I
Mankweng	M
Ivory Park	P
Umgababa	U

Gender	
Female	F
Male	M

Language	
Afrikaans	AF
English	EN
Ndebele	ND
Northern Sotho	NS
Sotho	SO
Swazi	SW
Tsonga	TO
Tswana	TW
Venda	VE
Xhosa	XH
Zulu	ZU

* Where further information on participants is lost or disconnected, only a Unique Identifier is given e.g. P256

Figure 4-33 Participant coding

Source: Author's own

4.6.5.4 Survey Coding

Coding was done through a thematic analysis of the answers to each open-ended survey question where the frequency of similar themes was counted. These themes were then aggregated to more generalisable themes. Figure 4-34 demonstrates thematic coding done in Excel before responses were aggregated.

Unemployment	Unemployment
Disadvantage I'm waiting longer for house	Inadequate housing
I applied for a job nearby my area and they told me to bring my CV and I did but unfortunately they didn't even look	Unemployment, Disappointment, Poor quality education
No financial scheme, no water, poor living facilities	Financial issues, Lack of service delivery
My difficulties I had felt was when I lost my both parents at the age of 15.	Loss of guardian
Difficulty in getting employment	Unemployment
Being partially sighted	Disability
Lack of skills	Poor quality education
Un employedUnskilledNo financially	Unemployment, Financial difficulties
i became pregnant at the early age, so that i did not complete my education	Teenage pregnancy, Educational issues
Financially crisis due to jobless	Financial issues, Unemployment
Being unemployed	Unemployment
My life was so difficult since my parents passed away it was not easy for me to live because they just died on the	Loss of guardian
Go in bed with an empty stomach	Lack of food
Unemployed	Unemployment
Sometimes I wish I wasn't born because consequences that I'm face with	Emotional issues
Being unemployed	Unemployment
Raising children as a single mother	Difficulty raising children, Single mother
Finishing matric and not having money to further my education	Lack of funds for education
Shortage of money, i struggle my mother did not work	Financial issues
I was raised by only one person which is my grandmother, I don't know my parents in my childhood	Loss of guardian, Emotional issues
To unable to help my mother for everything she done for me in life for	Emotional issues
N/A	N/A
it feels so difficult to study and finish your matric but not have money to continue studying	Lack of funds for education
the moment of being a single struggling mother at a younger age but with God still survived,no job, income,while y	Teenage pregnancy, Single mother, Unemployment, Financial issues
Theirs no job in south africa.at the sametime rate is going high why government?	Unemployment

Figure 4-34 Thematic coding of question on disadvantage and disability

Source: Author's own

The first round of coding was done at the end of Phase 1 whereby a predefined list of the emerging themes was added to the surveys for Phase 2 and 3. This was only done for questions

of particular interest to the research.²²² This allowed for a breadth of themes to be captured in Phase 1 and then the importance of those themes to be ranked in Phase 2 and 3. The differences in results based on the two methods of data collection (open-ended and predefined) shows the importance of the two-step process.²²³

In some cases, participants clearly misunderstood the question. Such answers have been left out of the analysis, and only relevant, comprehensible answers are included. Blank answers, answers that explicitly said, ‘not applicable’, and answers that were incomprehensible were coded separately.

4.7 Semi-structured Interviews

Semi-structured interviews were conducted in South Africa and Cambridge, USA. The aim of the interviews was to gain understanding in how and why MOOC designers design their MOOCs. Interviewees were found opportunistically through the following ways:

- Through taking/reviewing their online courses and emailing the instructors thereafter.
- Through attending conferences/workshops in South Africa that focused on e-learning.
- Through meeting managers of MOOC centres and accessing the MOOC designers through them.
- Through snowballing of the aforementioned methods.

A handful of interviews were arranged prior to getting to South Africa and USA, but majority of them were organised whilst in country as it was easier to be referred on to someone else once a face-to-face meeting had taken place. Figure 4-35 shows the planned list of questions to be asked. These questions would fluctuate depending on who I was interviewing. While most questions were answered in some way by the interviewee, it often did not happen in the chronological sequence it appears in the chart as the categories overlap.²²⁴

²²² This was not done for every open-ended question as the surveys were already long and I didn’t want to add much more onto them. Rather it was done for each genre of questions. For example, in Phase 1, it emerged that questions on historical difficulties and present-day challenges returned similar responses, thus the open-ended challenges question was removed, and the predefined list was added to cover the general theme of challenges faced.

²²³ If either approach was done without the other, the quality of the research would have been reduced. For example, in the open-ended questions, many participants did not think of all the challenges they experienced and thus the mentions in each theme were relatively low. However, they raised some new themes that was not captured in literature. When the predefined lists were used, all responses increased showing the usefulness of predefined lists for ranking. However, if the predefined list was built based on literature, without asking for participant input in Phase 1, then some of the unique themes may have not been captured.

²²⁴ For example, the African context might be brought up when asked about strategies for making courses more inclusive. Additionally, different interviewee’s spent gave different levels of depth for different questions.



Figure 4-35 Chart of interview questions

Source: Author's own

4.7.1 Interviewee Categories and Codes

Information regarding the interviewees is outlined in Table 4-6 and Table 4-7.²²⁵ Race is mentioned, not as a biological demarcation, but because race as a social construct has variedly advantaged and disadvantaged groups of people, depending on their context. One factor to note here is that the University of Johannesburg, strictly speaking, did not offer MOOCs as their online courses were aimed at existing students. However, given that these online courses arguably reached more marginalised students in South Africa than any of the other courses, it was valuable to include them in the research.^{226 227}

Table 4-6 South African MOOC interview breakdown

Region	South Africa
Interviewee Types	27 Interviewees: <ul style="list-style-type: none"> • 19 MOOC instructors • 6 MOOC support team • 2 practitioners
MOOC Platforms	<ul style="list-style-type: none"> • Coursera • edX • FutureLearn • Blackboard
Race	Categories used as per census (South Africa Population 2019): <ul style="list-style-type: none"> • 16 White interviewees • 11 Black and Minority Ethnic (BME) interviewees <ul style="list-style-type: none"> ○ 5 black ○ 3 Indian ○ 3 coloured <p>Due to the small numbers in the latter category, I refer to this group collectively as Black and Minority Ethnic (BME). The intention is not the homogenise their experiences, but to protect their identities, as their uniqueness makes them easily identifiable. Additionally, some of the Indian and coloured interviewees spoke as 'black' in terms of South African BEE legislation that categorises such minorities as 'black'. This sample set of black MOOC designers is disproportionately higher in South Africa in comparison to other parts of the world, however, given that 79.4% of South Africans are black, black MOOC designers are still under-represented. It is also important to note that none of the 5 black MOOC instructors interviewed were leading their teams. They all worked with a white MOOC instructor that was senior to them.</p>

²²⁵ As the thesis aims to highlight cultural-epistemic imbalances in MOOC production, it is important to give the demographics of the MOOC designers interviewed.

²²⁶ The black South African population registered at University of Johannesburg (UJ) was 64% in 2012 which is much higher than the other three universities mentioned (See Section 2.2.4) (Cooper 2015:254)

²²⁷ Although University of South Africa (UNISA) is South Africa's largest university and is tailored towards distant education, it has not invested in MOOCs. Goosen (2015) is the only vague source to be found regarding one MOOC from UNISA, however, this MOOC could not be found online to be reviewed and was not investigated further. UNISA has instead turned towards an Open and Distance e-Learning (ODeL) model, which although related, is not the focus of this research.

Universities	4 Universities <ul style="list-style-type: none"> • University of Witwatersrand (4 MOOCs covered) • University of Cape Town (9 MOOCs covered) • University of Johannesburg (2 courses covered) University of Stellenbosch (1 MOOC covered)
Gender	<ul style="list-style-type: none"> • 11 Female • 16 Male
Nationality	25 South Africans 2 Non-South Africans based at universities in South Africa

Source: Author's own

Table 4-7 Demographics of Cambridge MOOC interviewees

Region	Cambridge, USA
Interviewee Type	8 Interviewees: <ul style="list-style-type: none"> • 1 MOOC Instructor • 6 MOOC Support Team • 1 Practitioner
MOOC Platform	<ul style="list-style-type: none"> • edX • P2PU
Race	Racial groups defined on the US Census: <ul style="list-style-type: none"> • 5 White American (Non-Hispanic or Latino) • 3 from Minority Ethnic Groups • In the USA it was harder to determine racial groups, in comparison to South Africans who openly mention and acknowledge their race.
Universities	<ul style="list-style-type: none"> • HarvardX • MITX
Gender	<ul style="list-style-type: none"> • 2 Female • 6 Male
Nationality	Unknown

Source: Author's own

At the time of interviews, approximately 60% of the MOOC instructors in South Africa at the time were interviewed and was thus a decent sample size.²²⁸ The same cannot be said for the Cambridge interviewees as only a small fraction of those involved in MOOC production in their universities were interviewed, let alone the country.²²⁹

²²⁸ Since the interviews were conducted the amount of MOOCs, and thus MOOC designers, has doubled.

²²⁹ As most of the Cambridge interviews were done with MOOC support teams and management, these interviews were useful to ascertain their institutional culture, ideologies, management, and practices that filter into guiding how MOOCs will be produced by MOOC instructors in the region. This will be discussed further in Section 7.3.

MOOC interviewees were given codes according to the coding map in Figure 4-36.²³⁰

M	I	0	1	F	1	W
Interviewee Type		Unique Identifier		Gender	University	Race
Interviewee Type					Race	
MOOC Instructor	MI				White	W
MOOC Support Team	MS				Black or Minority Ethnic	B
Practitioner	P				University Code	
Gender					Unique University Code	
Female	F				1 to 6	
Male	M					

Figure 4-36 Interviewee coding map

Source: Author's own

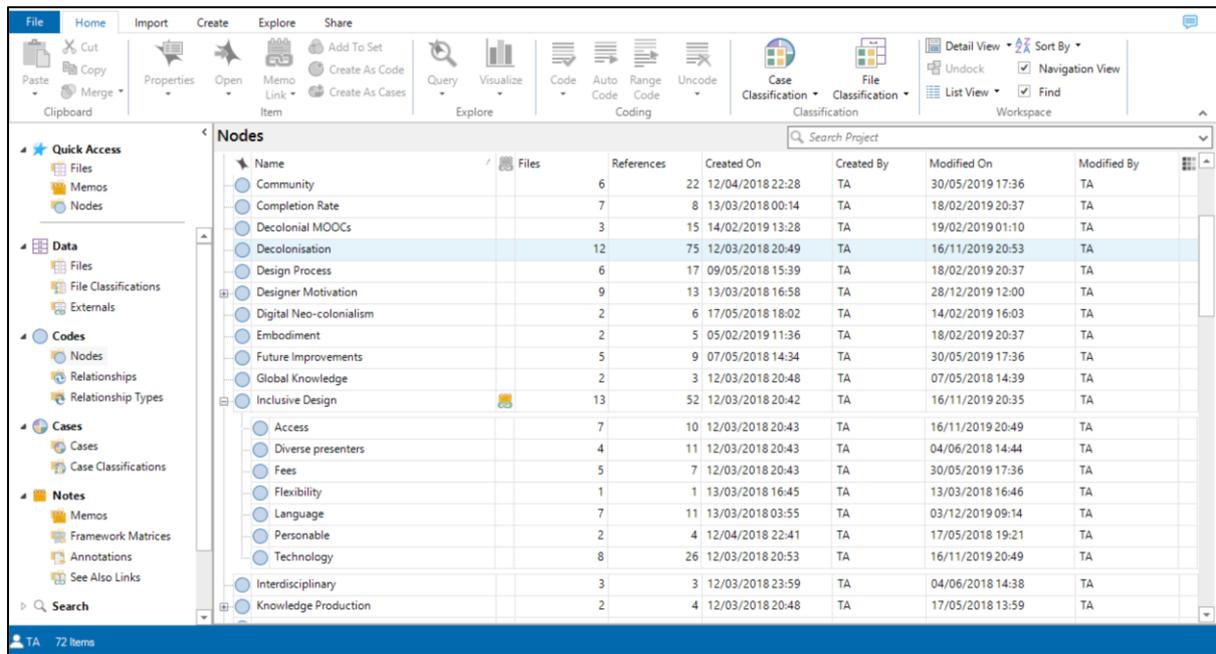
The MOOCs that interviewees worked on, either as instructors or support teams, were reviewed where possible.²³¹ This was done before and sometimes after the interview. Before the interviews, all South African MOOC landing pages were reviewed to help to identify specific questions for the interviews. After the interview, if anything interesting was mentioned that needed to be corroborated or investigated, a more in-depth review was done. In total, more in-depth reviews were done for 10 of the 16 MOOCs covered.

²³⁰ Universities were given codes to allow for some level of abstraction. As the MOOC community is small within each university, MOOC designers can be identified quite easily.

²³¹ One MOOC was no longer publicly accessible, and two others were not publicly available due to being only accessible to university students. Thus, 13 of the 16 MOOCs were reviewed briefly initially.

4.7.2 Interview Coding

Interviews were transcribed and then thematically coded on Nvivo, as demonstrated in Figure 4-37.



The screenshot displays the NVivo software interface with a list of nodes and their associated data. The interface includes a menu bar (File, Home, Import, Create, Explore, Share), a toolbar with various icons, and a main workspace area. The 'Nodes' list is the central focus, showing columns for Name, Files, References, Created On, Created By, Modified On, and Modified By. The 'Decolonisation' node is highlighted in blue.

Name	Files	References	Created On	Created By	Modified On	Modified By
Community		6	12/04/2018 22:28	TA	30/05/2019 17:36	TA
Completion Rate		7	13/03/2018 00:14	TA	18/02/2019 20:37	TA
Decolonial MOOCs		3	15/14/02/2019 13:28	TA	19/02/2019 01:10	TA
Decolonisation		12	75 12/03/2018 20:49	TA	16/11/2019 20:53	TA
Design Process		6	17 09/05/2018 15:39	TA	18/02/2019 20:37	TA
Designer Motivation		9	13 13/03/2018 16:58	TA	28/12/2019 12:00	TA
Digital Neo-colonialism		2	6 17/05/2018 18:02	TA	14/02/2019 16:03	TA
Embodiment		2	5 05/02/2019 11:36	TA	18/02/2019 20:37	TA
Future Improvements		5	9 07/05/2018 14:34	TA	30/05/2019 17:36	TA
Global Knowledge		2	3 12/03/2018 20:48	TA	07/05/2018 14:39	TA
Inclusive Design		13	52 12/03/2018 20:42	TA	16/11/2019 20:35	TA
Access		7	10 12/03/2018 20:43	TA	16/11/2019 20:49	TA
Diverse presenters		4	11 12/03/2018 20:43	TA	04/06/2018 14:44	TA
Fees		5	7 12/03/2018 20:43	TA	30/05/2019 17:36	TA
Flexibility		1	1 13/03/2018 16:45	TA	13/03/2018 16:46	TA
Language		7	11 13/03/2018 03:55	TA	03/12/2019 09:14	TA
Personable		2	4 12/04/2018 22:41	TA	17/05/2018 19:21	TA
Technology		8	26 12/03/2018 20:53	TA	16/11/2019 20:49	TA
Interdisciplinary		3	3 12/03/2018 23:59	TA	04/06/2018 14:38	TA
Knowledge Production		2	4 12/03/2018 20:48	TA	17/05/2018 13:59	TA

Figure 4-37 Coding of interviews on NVivo

Source: Author's own

As themes emerged from the interview data, they were further investigated if they related to addressing injustices in MOOCs.

4.8 Conclusion

This chapter outlined the theoretical framing of the research and the rationales for a grounded theory approach and mixed methods data collection. I discussed my positionality and a summary of the fieldwork, before unpacking the methods used to collect data through the online course, surveys and semi-structured interviews.

Chapters 5 and 6 that follow present findings from the online course and surveys conducted with PMPs. Thereafter, Chapters 7 and 8 unpack findings from the semi-structured interviews with MOOC designers. Chapter 9 then draws these findings together to synthesise approaches to designing justice-oriented MOOCs.

5 Potential MOOC Participants: Understanding their needs, preferences and aspirations

5.1 Introduction

This chapter outlines characteristics and conditions that describe the ‘Potential MOOC Participant’ (referred to as ‘participants’ in Chapter 5 and 6). Whilst the broader research aims to find out in what ways and to what extent MOOCs, and adaptations of it, could *address* the needs, preferences and aspirations of the marginalised, this chapter first focuses on **research sub-question 1**:

What are the needs, preferences, and aspirations of the marginalised, peri-urban youth in South Africa, specifically regarding education and technology?

Section 5.2 first outlines observations that were not captured in the survey responses. Section 5.3 shows responses to survey questions relating to participants’ wellbeing, namely the challenges they face, their visions of a good-quality life and aspects that bring them joy. Section 5.4 shows responses to questions on education and employment, where participants share their desired fields for study, skills of interest, educational shortfalls and learning preferences. Section 5.5 looks specifically at participants technology usage, and their perceived importance of phones and computers in their lives.²³² Section 5.6 presents findings from participant’s feedback after the online course was run.

5.2 Findings from Observations

Whilst most of this research is based on collected data in the form of interviews and surveys, the observations from the study are crucial to understand the participants, the context and the socio-technological limitations of the study.²³³

Access and privacy issues regarding email addresses

Although the advertisement asked for participants to have working email addresses, at least 50% of the participants across locations did not have an email address. For those that did have one, some forgot the password. For ease, Gmail²³⁴ was chosen as the email account we would

²³² One shortfall in the technology survey was that tablets were not asked about, and it has become popular to use tablets for educational purposes (Duran and Aytac 2016; Haßler, Major, and Hennessy 2015).

²³³ The research sites were described in detail in Chapter 4 (Methodology) and these observations extend this to take a deeper look at specific events, processes, and experiences that happened in the study.

²³⁴ This was a difficult decision to make as participants were not properly aware of how Google uses their data.

set them up with. The process for setting the account up was not that easy either.²³⁵ As the accounts needed to be verified, a message needed to be sent to a phone number, and not all participants had their phones or knew their phone numbers. Some participants would forget their passwords during the day and need to create new ones. The lack of email addresses illustrates the first barrier to accessing ‘free online content’.²³⁶ By encouraging participants to sign up to Gmail I was incorporating those who have thus far managed to have a low digital footprint into the digital world. This additionally raises ethical concerns when users do not fully understand that their data will be taken and used.

Course attendance

Many of the Computer Technology Centres (CTCs) at which I conducted the studies were overflowing with participants that wanted to do the course. Participants could not share computers as I needed individual data, thus I unfortunately had to limit the participants per day to the number of working computers in the room.²³⁷ Despite the advertisement being shared beforehand, some participants that came to the course did not know precisely what they were coming for nor did they meet the specifications (like having an email address or being able to use a computer). As news of the course was spread by word of mouth and WhatsApp messages (from the local hosts to their databases), full information about the course was sometimes left out. Upon asking why they came if they didn’t know what it was about, they responded that they were keen to learn and attend a free course (irrespective of topic).²³⁸ One reason may be that simply having time in front of a computer was a purpose in itself. The participants also repeatedly asked for certificates (which I had anticipated and prepared) despite there being no real weight to having an unaccredited certificate for doing a course on Career Development.

Blended learning

The course was intended to be run in a blended learning style, with time allocated for individual learning, discussion with peers, and class reflections at various points in the day. Given the

²³⁵ This process would shift the whole programme back by an hour. After the first few days of running studies, this time was factored into the day’s events.

²³⁶ Most MOOC platforms need one to sign up and register with an email address in order to manage students’ progress and obtain data for learning analytics. Those who can’t or don’t want to register with an email address, cannot browse the content. Additionally, signing up to a MOOC platform means agreeing to its terms and conditions such as for data to be passed on to third parties (Khalil, Prinsloo, and Slade 2018).

²³⁷ I shared the course link with everyone interested, however, due to the barriers involved in doing the course, such as needing to set up an email address, it would have been difficult for them to complete on their own. The overflow of participants made me realise how in need the community was for education.

²³⁸ Some might have attended because lunch was mentioned, however, in the sessions I had to remind them to take a lunch break as many became engrossed in the exercises.

varied levels of computer literacy, this was not possible as some students would race ahead if they could type fast and speak English fluently, whereas others required more time to think.²³⁹ It was also observed that older participants tended to be far less digitally savvy in comparison to younger participants, although there were many younger participants who also struggled with the technology. Those who finished early and left missed a lot of valuable class discussion that happened towards the end of the day. Some stayed and assisted others.²⁴⁰ Whilst peer-to-peer learning did not happen in the organised way that I had planned, participants continuously chatted and helped each other through-out the day and asked each other for help before asking me. I had also taught them how to Google a word if they did not understand it and would thereafter see participants doing this on countless occasions instead of asking others what it meant. This allowed them independence in their learning, which they chose over asking for help.

Computer literacy levels

Despite basic computer literacy being a specification in the advert, participants with completely varying levels of computer skills attended. On the one hand, some participants, who were students at the CTCs, would help me with difficult networking and internet problems that I could not solve. On the other hand, I had to teach some participants how to hold and move a mouse. While most participants knew how to use a smartphone and thus were familiar with norms of Graphical User Interfaces (GUIs), the keyboard was a difficult interface to grapple with for many. For example, using the '@' for an email address was a difficult lesson.²⁴¹ Overall, once participants were taught basic mouse and keyboard skills they proceeded independently, albeit slowly.

Internet literacy

While computer literacy was easy to pick up, internet literacy proved far more difficult. Some of the difficulties included dealing with pop-ups, software update requests, viruses and default browser questions.²⁴² Participants, understandably, often could not tell what was a part of the course, and what was a random pop-up or link that was unrelated and should not be clicked. As one becomes familiar with the internet, one is able to filter out adverts and other distractions,

²³⁹ Some participants would finish the entire course by 3pm and others would finish at 6pm (after the official end of the course).

²⁴⁰ Some participants who were keen, volunteered to come the next day and help others.

²⁴¹ , It required teaching them to hold the 'Shift' button down while selecting the correct key.

²⁴² In addition, the computers used are not always connected to the internet so upon connection there were many updates and anti-virus pop-ups.

but many participants were not able to do this. Other things like blue underlined text indicating a hyperlink, or drop-down arrows for more selections, were not common knowledge and needed to be explained. Multiple tabs were also hard for participants to manage as they would panic thinking they had lost all their information if a blank tab had opened. Navigating through the course buttons was also not intuitive which is something to consider for GUI designers.

Google reCAPTCHA

To protect all the Google form surveys from spam and abuse, I had added in a Google reCAPTCHA feature, which is a simple box one ticks at the end of the survey that says, ‘I’m not a robot’. What seemed to be a simple tick-boxing task, ending up wasting a lot of valuable time. reCAPTCHA had a problem identifying the users as humans and presented a series of image identification tests for the user to prove they are human. These tests were quite tricky and if one made a mistake, even more tests would be run until it was happy that the user is human. This test wasted approximately 5 minutes after every survey and frustrated participants. The tests never popped up on any of my devices as my frequent internet use allowed for it to know I am human. Although this feature was annoying and time consuming, it served one huge unintended purpose and for this reason I did not remove it; it helped to ensure that there was internet connection before a user submitted. When it was removed, if a participant clicked submit and there was not internet, it would time-out and all their answers would be lost. With this, if the ‘I’m not a robot’ button could not be checked, it meant the internet was down. I could reconnect it before the participant submitted. Creating features that can hold information when it is typed offline is thus crucial in internet-erratic places.²⁴³

5.3 Wellbeing Survey Findings

The Wellbeing Survey sought to understand what difficulties participants face in their lives, what they view as a good-quality life and what brings them joy.

5.3.1 Disadvantages: open-ended question

Participants were asked open-endedly to share any forms of disadvantages they had felt in their lives.²⁴⁴ An aggregated summary of categories that emerged is shown in Table 5-1, and a more detailed thematic analysis is displayed in Table 5-2. The quotes from participant responses are kept exactly as they wrote them, with spelling and grammar errors intact, to represent them

²⁴³ An example of this is Google docs offline.

²⁴⁴ This question was asked in Phases 1, 2 and 3. While this question was meant to be more historical, participants mentioned both present and historical disadvantages.

accurately. Table 5-1 shows that the most common disadvantage participants face is financial difficulty (85)²⁴⁵, followed by educational difficulties (66) and family difficulties (45).

Table 5-1 Aggregated responses to 'Describe any form of disadvantage or difficulty you have felt in life, if you have felt any.'

Disadvantages (aggregated)	Code	Frequency
Financial difficulties	Fi	85
Educational difficulties	Ed	66
Family difficulties	F	45
Emotional wellbeing	Em	15
Poor basic needs & infrastructure	N	14
Legal and service delivery issues	L	10
Danger and abuse	D	9
Health issues	H	3

Source: Author's own

Table 5-2 Thematic responses to 'Describe any form of disadvantage or difficulty you have felt in life, if you have felt any.'

Disadvantages	Description	Code	Frequency
Unemployment	Difficulty finding a job	Fi	51
Financial issues	No money or not enough money	Fi	26
Loss of guardian	Death or disappearance of parent/guardian	F	26
Lack of funds for education	Unable to pay for education	Ed	25
Poor-quality education	Receiving no, or poor-quality education	Ed	22
Inadequate housing	Lack of, or inadequate housing and living conditions	N	10
Emotional issues	Emotional trauma or lack of emotional support	Em	9
Teenage pregnancy	Getting pregnant at a young age	F	9
Educational issues	Difficulty in schooling such as poor grades,	Ed	8
Distance to resources	Difficulty getting to school, library, job, town	Ed	6
Unjust legal system	Being treated unfairly by the law	L	6
Discouraged	Demotivated or disappointed	Em	6
Graduate unemployment	Difficulty finding a job as a graduate	Fi	5
Lack of educational support	Not getting educational support	Ed	5
Physical abuse	Abuse such as hitting	D	5
Lack of food	Lack of food	N	4
Difficulty raising children	Difficulty providing financial or emotional support to	F	3
Physical disability	Physically handicapped	H	3
Loss of siblings	Death or disappearance of sibling	F	2
Immigration issues	Problems being an immigrant in South Africa	L	2
Raising siblings	Difficulty providing support to siblings	F	2
Sexual abuse	Abuse such as rape	D	2
Single mother	Difficulty raising children alone	F	2
Crime	Having belongings stolen or being threatened	D	1
Drugs	Prevalence of drugs/drug dealers in neighbourhood	D	1

²⁴⁵ The numbers in brackets for the remainder of this chapter refer to the frequency of mentions as indicated in the tables.

Family/Relationship issues	Difficulty in managing relationships	F	1
Lack of medical support	Lack of, or inefficient, healthcare	L	1
Lack of service delivery	Lack of, or inefficient, services	L	1
Poor working conditions	Poor-quality working conditions	Fi	1
Resorting to crime	Being forced to resort to crime	Fi	1
Underemployment	Feeling capable of a better or more permanent job	Fi	1

Source: Author's own

Financial difficulties

The main financial difficulties, unpacked in Table 5-2, were unemployment (51), not having enough money (26), graduate unemployment (5).²⁴⁶ The point on crime was particularly eye-opening where P089M27MSO stated, "*[I]t strains the graduate to an extent of doing illegal things for survival and end up being wasted or behind bars*".

Educational difficulties

The main educational difficulties were lack of funds for education²⁴⁷ (25) and poor-quality education (22). Lack of funds was expressed by P136P19FNS who stated, "*I felt difficulty by the time when my parents were telling me that they don't have money to take me to school so they suggested that i must take a gap year*". Whilst poor-quality education included mentions of the quality of the schools and its teaching, participants also mentioned living conditions that affected their education, resulting in issues such as dropping-out, absenteeism, low grades and failures, rejections from further education institutes, long distances to school, and lack of academic support. P039C29FNS, for example, explains her difficulty getting to school, '*I was attending school very far and was working [walking] for 1 hour to get to school*'.

Family difficulties

The main family difficulties faced was loss of a parent or guardian (26). In some cases, it was both parents: '*My difficulties I had felt was when i lost my both parents at the age of 15*'.²⁴⁸ (P214U24MZU). Additionally, there were 2 mentions of loss of siblings. Teenage pregnancy

²⁴⁶ The separation between general unemployment and graduate unemployment is an important distinction. Participants fell into two groups, those searching for opportunities without tertiary education, and those searching for opportunities with tertiary education.

²⁴⁷ This could have also been included in financial difficulty as it is the intersection of two problems: lack of fund and lack of education. It was chosen to be categorised under education as that was the end goal in this case.

²⁴⁸ This correlates with the demographic information in the Methodology Chapter which indicated that only 36% of participants had both parents when growing up. 42.8% were raised by single mothers, however, it is not clear whether the father had left or passed away.

(9), difficulty raising children (3), and being a single mother (2) were also mentioned²⁴⁹. This extended not only to raising children, but also siblings (2), as stated by P144P26FBL: *'my life was so difficult and i had to look after my younger brother'*. Lack of self-care was a huge factor in this: *'when i give birth to my first born an going back to school after a week'* (P154P21FZU). Beyond this, participants faced other issues such as family disputes and issues with relatives.

Emotional wellbeing

Due to difficulties in their lives, participants faced many emotional difficulties that are often overlooked. Emotional issues (9) led P243U00FZU to make the comment *'Sometimes I wish I wasn't born because consequences that I'm face with'*. Even the disappointment from job rejections leads to psychological issues such as lack of self-worth, over and above the financial difficulty: *'in job hunting, always got my hopes high in every application and didn't get anything up to this far'* (P088M00FNS). These mental and emotional difficulties, also intersect with physical disabilities (3) as highlighted by P109M20MNS: *'I have lost my left eye when I was younger and now I do not know how it feels like to actually see with both eyes.'*

Basic needs, infrastructure and legal issues

Many participants still battle with basic needs such as adequate shelter (10) and lack of food (4). P195P17FTO shared that she *'had to sleep in a raining shack in other[order] to survive'* whilst P242U00FZU shared that she had to *'[g]o in bed with an empty stomach'*. These also link to poor service delivery and basic healthcare: *'when i was sick then went to hospital and had to be left unattendent'* (P258). There were 6 mentions of participants feeling unfairly treated by the law: *'[I] was in a position of self defence but i end up in prison dew to the lack investigation.'* (P212U28MZU).

Danger and abuse

There were 5 mentions of physical abuse from within participants' families or in their community. P057I27FZU shares, *'when i was young i was pregnant then my uncle heat[hit] me and i got miscarage'*. Two participants mentioned sexual abuse: *'my child has being raped and policeman said the guy is under age'* (P029C32FTO). In addition to this, participants mentioned crimes such as hijacking and murder in addition to drug taking and drug selling.

²⁴⁹ Interestingly, being single mother is not mentioned more, given that 40.8% of the participants were single parents. It could perhaps be that being a single mother is an accept normality of life and is not seen as a disadvantage.

5.3.2 Challenges: predefined list

Figure 5-1 shows the ranking of challenges when explicitly asked to choose from a predefined list of possible challenges faced in their lives currently.²⁵⁰ The first three themes in Figure 5-1, relating to unemployment (118), financial issues (110) and educational issues (100), stayed in pole positions. Issues of crime (95), drugs (79), business seed capital (93), lack of career guidance (93), business mentorship (89), and family issues (74) rose in ranks when they were asked explicitly. Of particular significance was the increase of responses indicating they were a single parent (70).²⁵¹ This shows that single parents don't necessarily think of being a single parent as a challenge, except when specifically asked. Health issues once again remained relatively low (44), or at least not perceived as significant life challenges presently.

²⁵⁰ This question was asked in Phases 2 and 3 only. An option of 'other' was also added if participants wanted to add something to the list. The predefined list was created based on a thematic analysis of the open-ended question on challenges in Phase 1. The open-ended question on challenges was removed after Phase 1 due to the answers being a repetition of the disadvantages question.

²⁵¹ Additionally, this is an objective statement rather than a perception like some other options on the list.

Select any of the following challenges you are experiencing in life right now

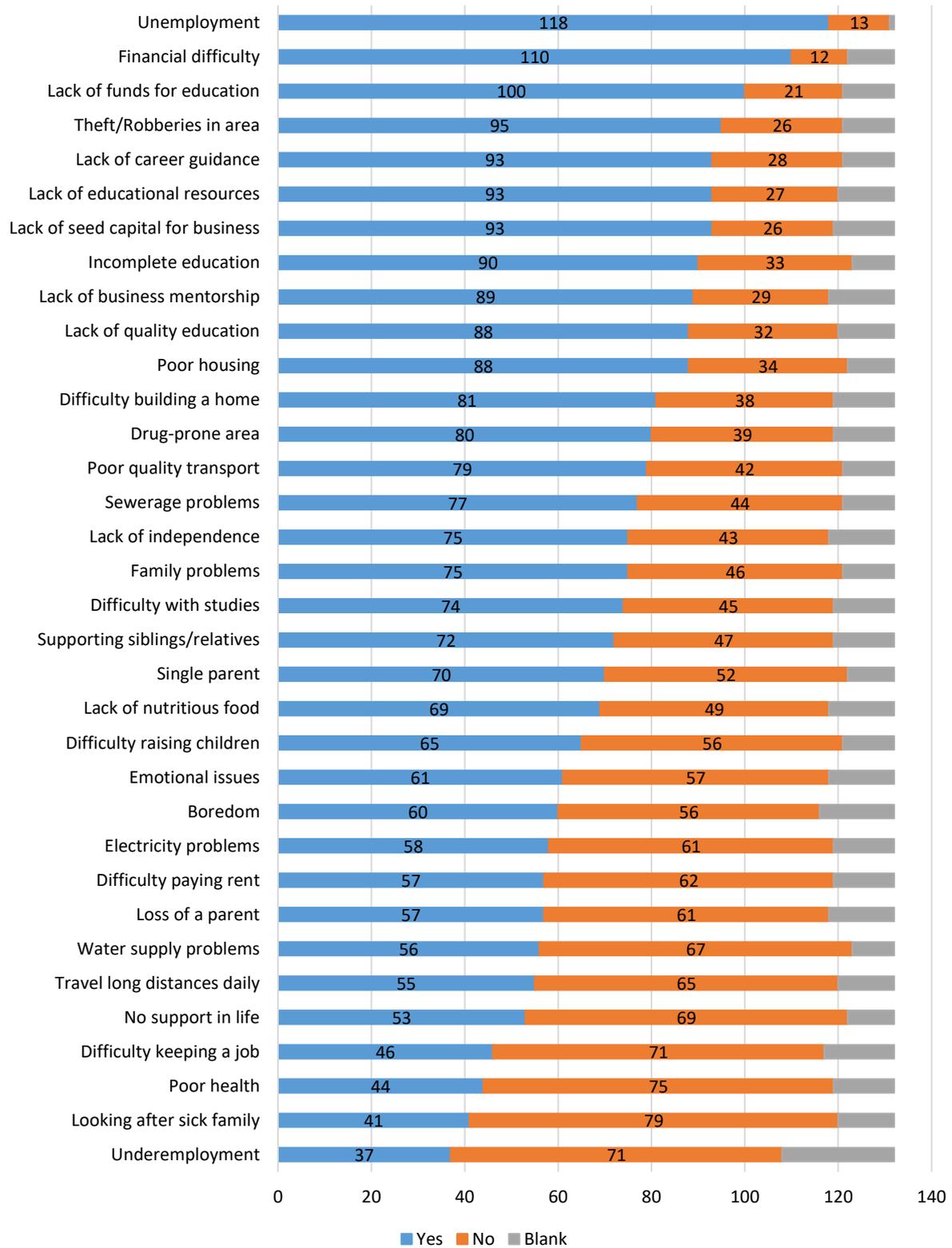


Figure 5-1 Responses to 'Select any of the following challenges you are experiencing in life right now.' (Phases 2 and 3)

Source: Author's own

5.3.3 Aspects of a Good, Ideal Life: open-ended question

Table 5-3 and Table 5-4 shows responses to what a good, ideal life would be like.²⁵²

Table 5-3 Aggregated responses to 'List 3 aspects of a good, ideal life.'

Good/Ideal life (Aggregated)	Code	Frequency
Financial security	Fi	216
Basic needs and infrastructure	N	86
Education	Ed	80
Family and relations	F	77
Characteristics and outlook	CO	54
Business and career	B	34
Health	H	33
Social and community engagement	S	21
Sports and Recreation	SR	8
Religion	Re	5

Source: Author's own

Table 5-4 Thematic responses to 'List 3 aspects of a good, ideal life'

Good/Ideal life	Description	Code	Frequency
Be educated	To access and complete education	Ed	72
House/home	To own, or live in decent accommodation	N	69
Get a Job	To get a job	Fi	61
Family	To enjoy time with relatives and for family to be safe	F	50
Get a stable job	To get a better or permanent job	Fi	38
Own a car	To own a car	Fi	30
Financial stability	To be financially stable	Fi	30
Good health	To have good health	H	26
Support family	To provide for and support family's needs	Fi	22
Own a business	To own a business	B	19
Have money	To earn, save, and spend money	Fi	17
Help others	To help others	S	14
Independence	To have independence	CO	13
Children	To enjoy time with children	F	11
Basic needs met	To have all basic needs met	Fi	8
Career	To advance in career	B	7
Food	To have food daily	N	7
Happiness	To be happy	CO	6
Motivate others	To motivate and inspire others	CO	6
Respect	To respect oneself and others	CO	6
Achieve goals	To set and achieve targets and goals	CO	5
Afford anything	To be able to afford anything one wants	Fi	5
Be married	To get married	F	5
Spiritual wellbeing	To be spiritually well	Re	5

²⁵² This question was asked in all phases.

Business woman	To become a business woman	B	4
Educate others	To empower and educate others	Ed	4
Education for children	To provide children with education	Ed	4
Recreation	To relax and have leisure time	SR	4
Social	To have a social life and social networks	S	4
Water	To have clean water	N	4
Hopeful	To have a hopeful, motivated and positive outlook	CO	4
Afford education	To be able to afford education	Fi	3
Emotional wellbeing	To have emotional well being	CO	3
Friends	To have friends who are a good influence	F	3
Healthy environment	To live in a healthy environment	H	3
Lifestyle	To enjoy a good lifestyle	H	3
Raise children well	To be good parents and raise children well	F	5
Security	To feel safe and secure	N	3
Have experience	To gain experience in career	B	3
Confidence	To have self-confidence and self-esteem	CO	3
Discipline	To have self-discipline and self-control	CO	2
Sports	To be able to play sports	SR	2
Supportive family	To have support from family	F	2
Travel	To explore and travel	SR	2
Better at school	To improve at studies	CO	1
Clothes	To have clothes	N	1
Create jobs	To help create jobs for others	S	1
Develop community	To help develop the community	S	1
Free school meals	To have free meals at schools	Fi	1
Good character	To have good character	CO	1
Good organisational skills	To have good organisational skills	CO	1
Good service delivery	To have good service delivery	N	1
Have parents	To have parents alive	F	1
Leader	To become a leader in community	S	1
Live in city	To be able to live in the city	Fi	1
Meaning in life	To have meaning in life	CO	1
No smoking	To leave smoking	H	1
Balanced life	To have balance in life	CO	1
Sanitation	To have clean sanitation	N	1
Alive	To be alive	CO	1
Work from home	To be able to work from home	B	1

Source: Author's own

Financial security

Participants mentioned getting a job (61), a stable job (38), owning a car (30), and generally being financially stable (30) as part of a good life. There were 5 mentions of being able to afford anything: *'having to get whatever you desire'* (P041C18FZU). P132P36FTW wanted to *'save more money for my children'*.

Basic needs and infrastructure

Participants mentioned having a house or home (69) as their main basic need for a good life. This ranged from having *'proper shelter'* (P233U31MZU), to wanting *'my very own beautiful and big house with garden'* (P159P41FXH). Other basic needs such as clean water (4) and security (3) were mentioned much less. Clothes, good service delivery, and sanitation only had one mention each.

Education

The highest thematic response was to be educated (72). For P154P21FZU, *'having metric'* would be part of a good life. There were also mentions of educating others (4) and education for their children (4). P192P23FTO described *'being able to take my kids to a good creche and get quality education'* as part of her good life.

Family and relations

Spending time with family (50), specifically one's children (11) was part of a good life. P214U24MZU stated that a *'[g]ood life is spending quality time with people you don't wish to lose'*. P109M20MNS highlighted having a *'[h]ealthy relationship with parents'*. P130P24FNS wanted to get *'married with white wedding before 30 years'*.²⁵³

Characteristics and outlook

A wide range of characteristics and outlooks were described as a good life: independence (13), happiness (6), motivational (6), respectful (6), goal-setting (5), hope (4), emotional wellbeing (3), confidence (3), and discipline (2) amongst others. P261 described a good life as *'A life of independence in all aspects.'* P039C29FNS stated, *'a good ideal of life is to be able to reach your goals.'* P112M00FSO said, *'always knowing that everything is possible its just a matter of time.'*

Business and career

Owning a business (19), and particularly being a businesswoman (4) was considered by some to be part of their ideal lives. P077I30MZ hopes *'[t]o be a top business man in the world'* and P269 wants to *'become a business woman work at my own place'*. Having a career (7) was also highlighted such as P072I18FZU who wanted to *'a career that make u fell happy'*

²⁵³ White wedding refers to the Western/Christian style of getting married i.e. with a white dress, a ring, and an exchange of vows.

Health

Having good health (26), living in a healthy environment (3), and living a good lifestyle (3) was important to a good life for some participants. P168P23FEN stated *'Been healthy all time'* and P192P23FTO stated *'being able to afford good health services for my kids'*.

Social and community engagement

Helping others (14) and having a social life and networks (4) was highlighted by some participants as part of their good life. P259 wanted to *'support other people when they need help'*. P177P23FXH envisioned *'[t]ravelling to touch people life with my own fundings'*. P205U32FZU said, *'I want to be a motivational speaker'*.

Sports and recreation

Recreation (4), sports (2) and travel (2) had very few mentions of being part of a good life. P148P29FTO wanted *'to go to recreation with children no matter is in white place or not'* and P024C24MEN highlighted *'having time to relax with my friends and relatives'*.

Religion

'Spiritual wellbeing' (P105M31FNS) was raised by 5 participants as part of a good life. P239U18FZU stated *'having a good relationship with my creator'* and P153P22MXH said *'my spiritual side comes first'*.

5.3.4 Aspects of a Quality Life: predefined list

Through adapting surveys done by Clark et al. (2007, 2007; 2001) on wellbeing in South Africa, a list of predefined options on what a good-quality life could be defined by, was included in the Wellbeing Survey from Phase 1. The list of options can be seen in Figure 5-2. By comparing the open-ended (Table 5-4) and predefined lists, the predefined list gives a holistic ranking of all factors e.g. access to clean water (4) and sanitation (1) were not highly ranked in Table 5-4 but it is ranked fourth in Figure 5-2 (155 mentions). The predefined list also itemised aspects that the participants did not think of but were regarded as essential by many when mentioned e.g. *'living long'*, *'sleep and rest'*, *'political rights'* and *'access to family planning'*.²⁵⁴

²⁵⁴ These examples all have more than 90 participants regarding them as essential to quality of life.

The open-ended list was useful in ensuring all aspects of a quality life are identified. For example, the social and community engagement aspects (21 mentions) that were not on the predefined list. Neither was the ability to own a business or advance in career (34 mentions) or spiritual wellbeing (5 mentions).²⁵⁵ Additionally, the open-ended question helps to uncover the nuance of certain themes. For example, while the predefined list in Figure 5-2 simply states ‘education’, the open-ended list has ‘get an education’, ‘educate others’, and ‘education for children’ as aspects of a quality life.

²⁵⁵ These mentions refer to Table 5-3. I do not mean to imply that Clark (2016) did not cover these topics in his questionnaires but rather that the specific predefined list that I drew from in Clark and Hodgett (2007:39) did not list these. For example, religion was discussed separately in another part of the questionnaire.

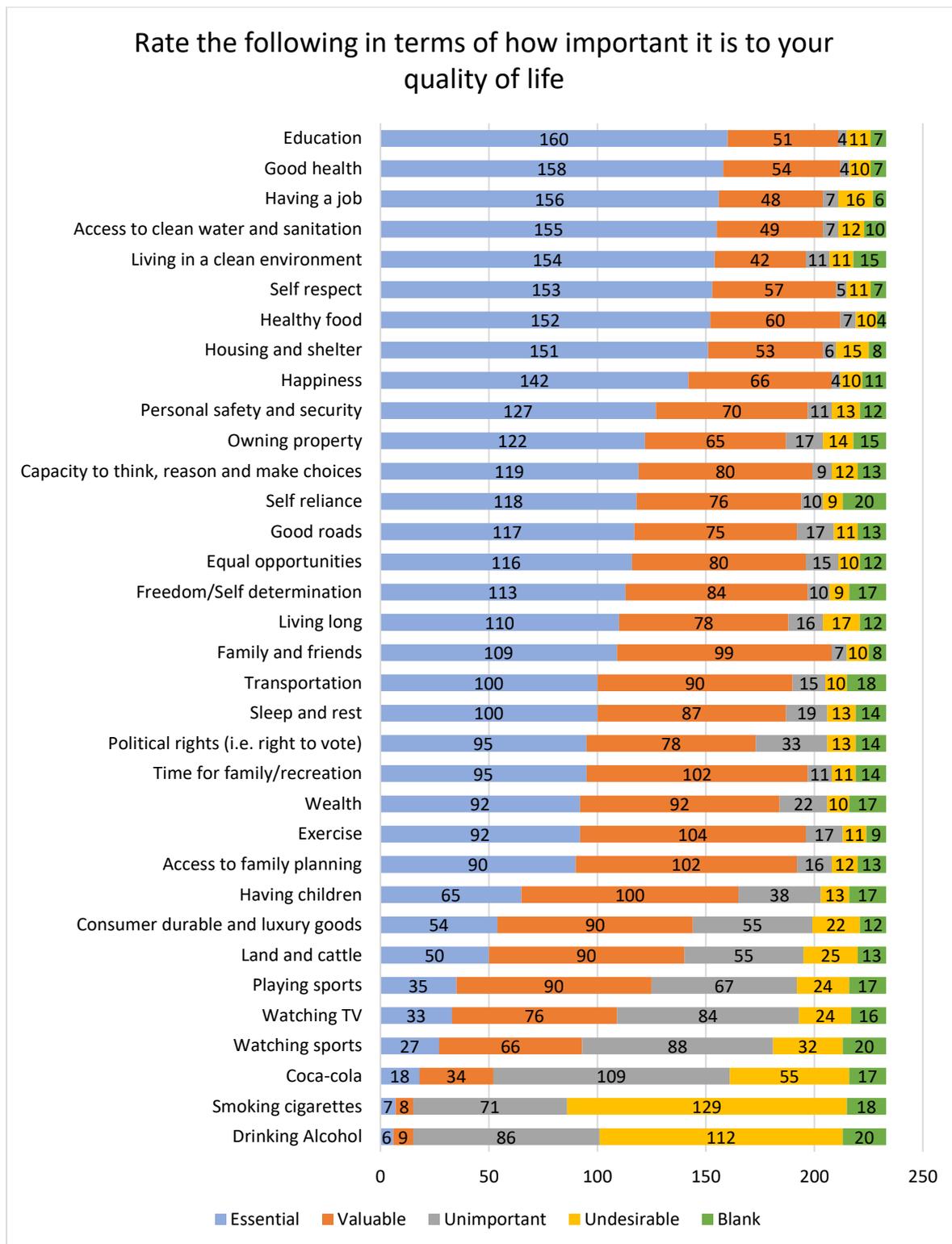


Figure 5-2 Responses to 'Rate the following in terms of how important it is to your quality of life'

Source: Author's own, adapted from Clark (2016)

5.3.5 Aspects of a Quality Life: including technology questions

In Phases 2 and 3, options directly relating to technology were added to the list. The responses can be seen in Figure 5-3. Through normalising the responses, we see that 50% of participants

thought computer literacy was essential to quality of life.²⁵⁶ All four technological options in Figure 5-3 would fit into the lower half of Figure 5-2, indicating they are far less essential than other aspects of a good, quality life. Interestingly, computer literacy was seen as more important than the devices itself. Smartphones were also not seen as that valuable relative to other options given in both Figure 5-2 and Figure 5-3. If we were to insert smartphones into the ranking in Figure 5-2, it would fit alongside ‘Consumer durable and luxury goods’ (ranked as 23.2% essential). This ranking of smartphones when looked at holistically in relation to broader quality of life should be kept in mind in Section 5.5, which focuses on technological uses and preferences in isolation from the bigger picture.

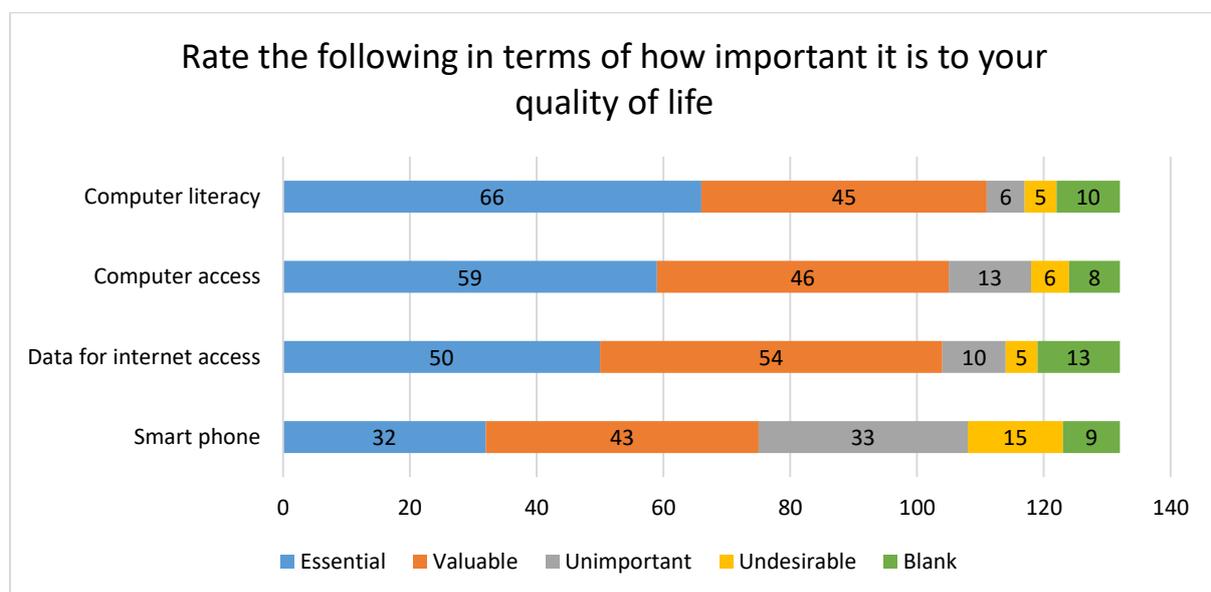


Figure 5-3 Responses to ‘Rate the following in terms of how important it is to your quality of life’ – Technology questions

Source: Author’s own

5.3.6 Aspects bringing Joy

Interestingly, the responses to the question ‘What brings you joy?’ were very different from the question on what a good, ideal life is. As can be seen in Table 5-5 and Table 5-6, themes such as family (134), interests and hobbies (36), characteristics and outlook (25) took precedence over finance and education. As the themes were already unpacked in the previous sections, they have not been unpacked again here for brevity.

²⁵⁶ As this was only done in Phases 2 and 3, there are only 132 respondents, and thus an exact comparison cannot be made with responses in Figure 5-2.

Table 5-5 Aggregated responses to 'What brings you joy?'

Joy (aggregated)	Code	Frequency
Family and relations (F)	F	134
Skills, interests, recreation and hobbies (SH)	SH	36
Characteristics and outlook (CO)	CO	25
Financial (Fi)	Fi	24
Religion (Re)	Re	18
Social and community engagement (S)	S	9
Education (Ed)	Ed	8
Basic needs and infrastructure (N)	N	2
Health (H)	H	2
Information Technology (T)	T	1

Source: Author's own

Table 5-6 Thematic responses to 'What brings you joy?'

What brings you joy?	Description	Code	Frequency
Family	Spending time with family; being supportive and united	F	66
Children	Spending time with and caring for one's children	F	41
Religion	Turning to God, prayer and attending church	Re	18
Friends	Spending time with friends	F	12
Music	Playing or listening to music	SH	12
Sports	Playing or watching sports	SH	9
Achieving goals	Excelling, improving or completing tasks and goals	CO	8
Happiness	Enjoyment through laughter and fun	CO	7
Employment	Having a job	Fi	6
Money	Being able to have and spend hard earned money	Fi	6
Life	Appreciating being alive	CO	6
Providing	Providing basic needs of self and family	Fi	5
Studying	Pursuing studies	Ed	5
Helping others	Being able to help others informally	S	5
Financial needs met	Meeting financial needs	Fi	4
Reading	Reading	SH	4
Games	Playing games, video or otherwise	SH	3
Loved ones	Being surrounded and supported by loved ones	F	3
Playing	Playing and having fun with children or otherwise	SH	3
Seeing others happy	Being happy for the happiness of others	S	3
Financial Stability	Feeling financially stable	Fi	2
Good health	Being in good health	H	2
Learning new things	Learning new things informally	Ed	2
Love life	Having a romantic life	F	2
Parents	Parents alive and well	F	2
Partner	Having a supportive partner	F	2
People	Being with people	F	2
Persevering	Having hope and not giving up	CO	2
Singing	Singing	SH	2
Accommodation	Having shelter	N	1

Being cared for	Being cared for by someone	F	1
Break from family	Time away from family	F	1
Comedy	Watching comedy shows	SH	1
Exploring	Adventuring and exploring	CO	1
Family is well	Knowing family is well	F	1
Fashion	Enjoying fashion	SH	1
Freedom	Being free	CO	1
Internet	Having access to internet	T	1
Meeting new people	Meeting and networking with people	S	1
Movies	Watching movies	SH	1
Ownership	Being able to own assets	Fi	1
Sharing knowledge	Sharing knowledge with each other	Ed	1
Support	Having support	F	1
Water	Access to clean water	N	1

Source: Author's own

5.4 Education and Employment Survey Findings

This section summarises findings from the Education and Employment Survey highlighting their educational ambitions, educational shortfalls and learning preferences. The aim was to ascertain in what ways online education could meet their educational aspirations, if at all.

5.4.1 Desired Fields of Study

97.84% of 231 participants who responded, stated they want to further their education. Table 5-7 highlights what participants would want to learn next.²⁵⁷ Fields of study that were mentioned more than 10 times were Education (i.e. teaching), Information Technologies, Administration, Healthcare, Business Studies and Engineering.

²⁵⁷ In order to present a clear table of career paths, responses indicating stages of study, such as 'degree' or 'honours', was removed. Notably though, seven participants indicated finishing Matric as what they would like to study next. As this table does not present thematic findings like previous ones, it is not colour coded.

Table 5-7 Responses to 'What would you like to study next?'

What would you like to learn next?	Frequency
Education	32
Information Technologies	28
Administration/Human Resources	23
Social Work/Psychology	20
Health Care	20
Business Studies	15
Engineering	11
Travel and Tourism	7
Media	7
Law	6
Supply Chain Management	5
Food and Catering	5
Technician	5
Management	3
Beauty Therapy	3
Finance	3
Marketing	2
Archives	1
Politics	1
Geography	1
Music	1
Agriculture	1
Driver's license	1
Sociology	1
Jewellery Design	1

Source: Author's own

The reasoning participants gave for such fields of study was categorised into themes in Table 5-8. Although participants are desperately in need of employment and are in financial difficulty (Section 5.3), choosing a career based on its financial benefits (33 – indicated by 'Better income'), was not as ranked highly as having a passion for the career (66), being of societal benefit (58), or pursuing knowledge for its intrinsic value (48).

Table 5-8 Reason for choosing field of study

Reason for wanting to study this	Description	Example	Frequency
Passion for subject	Indicate passion, desire, love or like for the career.	P271, who wanted to study psychology, stated, <i>'The study of the mind and how the subconscious mind affect our daily lives affect us is really interesting.'</i> P160P25FSO, who wanted to study human resources, stated, <i>'i love this career and understand it'</i>	66
Societal benefit	Indicate how they can help or benefit others	P154P21FZU, who wanted to study teaching, stated <i>'i want to help other children to active their dreams an i want them to dream big an have reason why are they going to school'.</i> P018C22FSO, who wanted to study nursing, stated, <i>'i want to help people who is sick'</i>	58
Own knowledge expansion	Focused on the pursuit of, and deepening of one's knowledge	P035C26FTO, who was interested in health stated, <i>'[I] want to gain more knowledge about health related issues'.</i> P044C31FVE, who wanted to pursue computer studies stated, <i>'because I want to know to use computer'.</i>	48
Better income	Focused on earning a good salary to live a better quality of life	P146P24FNS, who wanted to study logistics stated, <i>'because if you are not really educated you will end up taking any jobs that you don't want and earning small salary'.</i> P144P26FBL had a plan to temporarily be fire technician <i>'Because it has advantage in getting a job easily and the salary is good that i can start my own company in two years time'.</i>	33
Become a business owner	Focused on becoming a better business person	P205U32FZU had a more specific goal where she was interested in studying health and safety <i>'Beacause i want be own my constraction company in years coming'.</i>	11
Fame	Focused on becoming famous	P017C20MSO, who wanted to study music, reasoned, <i>'so that i can be a hip hop icon'.</i>	1

Source: Author's own

Figure 5-4 correlates the field of study (Table 5-7) with the reason for wanting to study it (Table 5-8). Education, health care, and social work are very much motivated by the desire to be of social benefit. These participants are choosing careers based on the need for it in their community. In contrast, careers in IT are more motivated by wanting to gain personal knowledge about the field. The passion for administration and human resources was interesting. Participants who indicated this, stated they were passionate about dealing with people, and had good inter-personal and organisational skills. The category for 'better income' indicated careers that one chose mainly for the monetary benefit rather than interest in the subject itself. Technician jobs such as being an electrician ranked highly in this category.

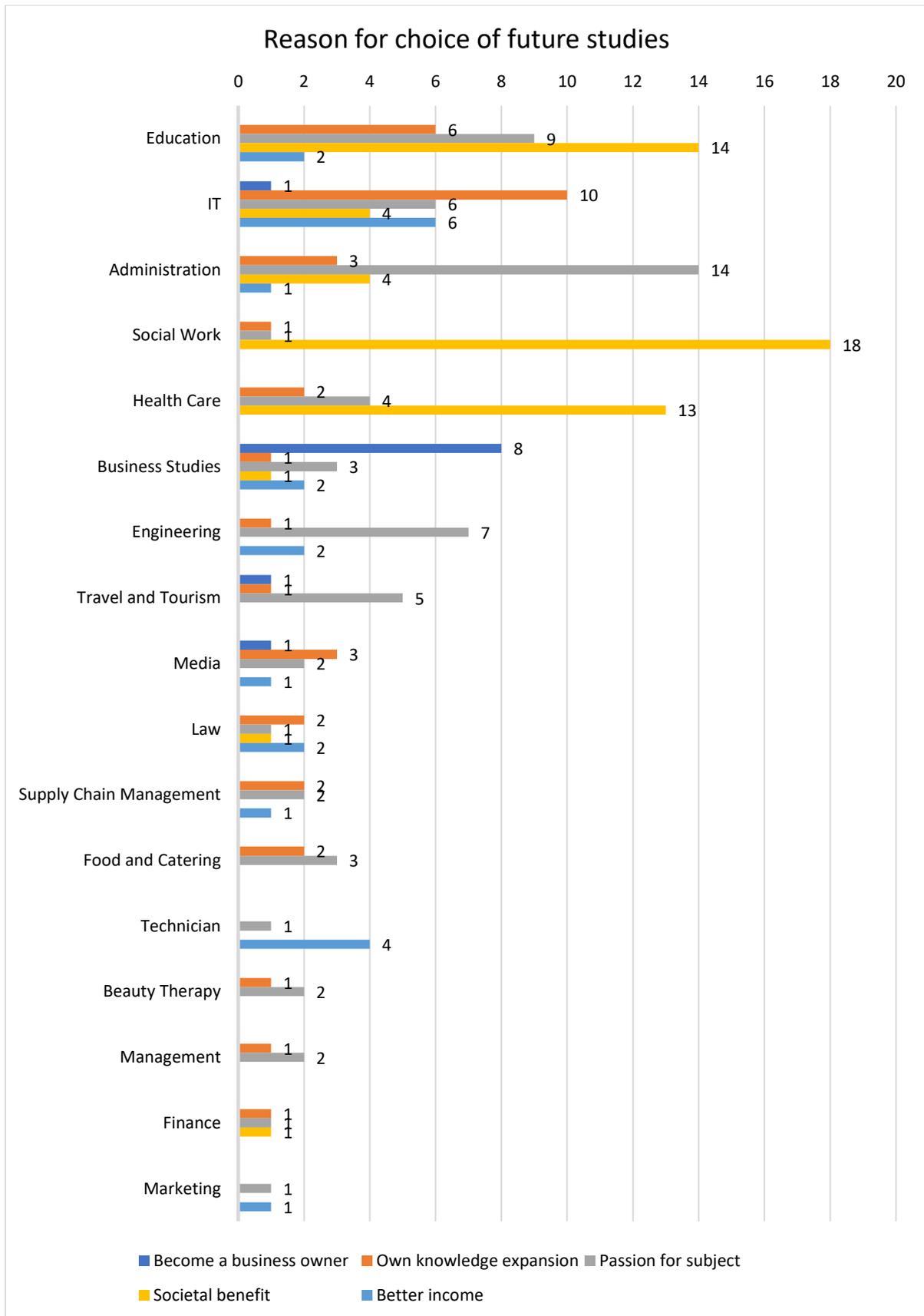


Figure 5-4 Reason for study mapped to field of study

Source: Author's own

5.4.2 Skills for Employment

Participants were asked to share what types of skills they need to help them find employment.²⁵⁸ Table 5-9 shows the aggregated responses where soft skills are ranked the highest. However, when looking at Table 5-10, the most unified response was the need for computer skills. This is in contrast to the responses to questions on a good, quality life and joy where technology was on the tail-end of the ranking lists.

Table 5-9 Aggregated responses to ‘What type of skills do you think you need to help you find employment?’

Skills needed for employment (aggregated)	Code	Frequency
Soft skills and interpersonal skills	S	79
Computer skills	Co	77
Further education/ Work experience	Ed	62
Subject-specific and Vocational skills	V	59
Office and management skills	O	17
Mentorship	M	11
Job application skills	J	9
Health related skills	H	8

Source: Author’s own

Table 5-10 Thematic responses to ‘What type of skills do you think you need to help you find employment?’

Skills needed for employment	Code	Frequency
Computer skills	Co	70
Communication skills	S	42
Further studies	Ed	35
Work experience	Ed	22
Academic and career guidance	M	11
Subject-specific skills	V	10
Management	O	8
Engineering	V	7
Perseverance	S	7
CV writing	J	6
Call centre training	O	5
Handwork	V	5
Networking	S	5
Nursing	H	5
Administration	O	4
Hospitality and food	V	4
Completing matric	Ed	4
Programming	Co	4
Strategy and negotiation skills	S	4
Conduct and self-presentation skills	S	3

²⁵⁸ The question asked ‘for employment’ thus the responses were more inclined to technical and vocational skills, rather than other skills such as character-building.

Confidence building	S	3
Creativity skills	S	3
Electrician	V	3
Interview	J	3
Leadership	S	3
Mechanics	V	3
Plumbing	V	3
Values (e.g. respect, compassion, trust)	S	3
Accounting skills	V	2
Business skills	V	2
Cleaning skills	V	2
Marketing skills	V	2
Music skills	V	2
Smartphone	Co	2
Team work	S	2
Travel & tourism	V	2
Beauty therapy	V	1
Boilermaker	V	1
Builder	V	1
Carpentry	V	1
Data capture	Co	1
Drug awareness	H	1
Healthcare	H	1
HIV awareness	H	1
Laboratory skills	V	1
Legal skills	V	1
Driver's license	V	1
Mathematics	V	1
Presentation skills	S	1
Problem-solving skills	S	1
Scientific skills	V	1
Security	V	1
Short courses	Ed	1
Social work	V	1
Teaching	V	1
Time management	S	1
Life skills	S	1

Source: Author's own

The main types of soft skills and interpersonal skills (79) mentioned were communication skills (42), perseverance (7), networking (5), and negotiation skills (4), among others. Regarding computer related skills (77), the main mention was computer skills (70), with 4 mentions of programming, among others. In terms of further studies (62), participants mentioned studying further generally (35), needing work experience and on-the-job training (22). wanting to complete matric (4) and taking short courses (1). In terms of subject-specific and vocational

skills (59), 10 participants mentioned wanting technical, subject-specific skills without specifying them. Subject-specific and vocational skills included engineering (7), hands-on work skills²⁵⁹ (5), and hospitality and food (5), electrician (3), mechanic (3), plumbing (3), and cleaning (2) among others. Business skills (2) were mentioned too as well as specific business skills such as accounting (2) and marketing (2). 14 participants mentioned office and managerial skills such as management (8), call centre training (5) and administration (4). 11 participants indicated wanting more mentorship, in the form of academic and career guidance. 9 others wanted job application skills, such as CV writing (6) and interview skills (3). 8 participants mentioned health related skills such as nursing training (5).

5.4.3 Educational Shortfalls

Participants were also asked what the shortfalls in their education were. Table 5-11 and Table 5-12 show the results of the responses, where once again, financial issues (72) and educational issues (65) rose to the top. Lack of information technology (5) was the least mentioned as a shortfall in their educational experiences.

Table 5-11 Aggregated responses to 'In what ways has your education fallen short?'

Educational shortfalls (Aggregated)	Code	Frequency
Finance	Fi	72
Low quality of education and poor results	Q	65
Content, pedagogy and skills	CP	32
Societal and personal problems	S	18
Resources and infrastructure	RI	17
Human support	H	14
No shortfall	N	12
Information Technology	T	5

Source: Author's own

Table 5-12 Thematic responses to 'In what ways has your education fallen short?'

Educational	Description	Cod	Frequenc
Funds	Lack of funds to pursue studies	Fi	40
Unemployed	(Low level) education did not lead to employment	Fi	28
No further studies	Did not/could not study further due to poor results	Q	23
Matric	Failed Matric	Q	14
No shortfall	No educational shortfall	N	12
Poor quality	Education was of poor-quality	Q	12
Resources	Lack of resources	RI	12

²⁵⁹ Participants said things like 'more handwork skills' (P230U33FZU). They could have meant that they want more hands-on practical experience generally or more hand-craft skills like jewellery making.

Experience	Did not provide experience	CP	11
Opportunities	Did not provide opportunities	CP	9
Mentorship	Did not have mentorship	H	7
Child	Had a child at early age	S	5
Difficult	It was too difficult	Q	5
No computer	No exposure to computers/computer skills	T	5
Own fault	Lack of success perceived as one's own fault	S	5
Short course	Undertook short courses	Q	5
Incomplete studies	Did not complete tertiary studies	Fi	4
Skills	Get not get enough skills and training	Q	4
Time	Not enough time; overloaded with commitments	S	4
Academic support	No academic support	H	3
Soft skill	Did not teach soft skills such as communication	CP	3
Transport	Distance to tertiary education too far and expensive	RI	3
Bad teachers	Poor quality teachers	H	2
Character building	Education lacked teaching moral, values, discipline	CP	2
Concentration	Difficulty concentrating	S	2
No critical thinking	Learning things byheart but not engaging critically	CP	2
Question value	Sceptical about the value of education	Q	2
Sanitation	Lack of sanitation	RI	2
Holistic education	Lack of broader education relating to politics and society	CP	1
Contribute to society	Unable to contribute to society with education	CP	1
Discouraged	Demotivating environment	H	1
Group study	Lack of ability to group learn	H	1
Lack of choice	Not enough options and paths	CP	1
No voice	No say in matters	CP	1
Permit	Not allowed to study in South Africa without study visa	S	1
Relocation	Relocation disrupted education	S	1
Strikes	Strikes impact education	CP	1

Source: Author's own

Finance

Lack of funds for education was the most highly ranked issue (40): *'i struggled to get money sometimes for paying school fees'* (P032C20FEN).²⁶⁰ This sometimes led to incomplete studies (4): *'By not completing my diploma due to financial challenges'* (P004C41FTW). 28 participants felt that their education insufficiently prepared them for being employable: *'not being able nto secure me a good employment opportunity'* (P089M27MSO).

²⁶⁰ The 2017 General Household Survey stated that 50.8% of 18-24 year olds reported not attending any education institute because of lack of funds for education. 11.6% reported family commitments and 18.1% reported poor education performance. 19.5% were satisfied with their education level (Maluleke 2019:27).

Poor-quality education

P122P21FSW comment summarises a few of the discontents with education, *'I failed my metric and had to get back and rewrite again. After rewriting i passed but not with high marks. I was not able to further my studies ,my results were low'*. Like her, others did not have adequate results to pursue further studies (23) or failed matric (14). P183P24FTO added, *'u need to have qualification if you dont u cant find a job'*. 12 participants expressed that shortfalls were *'because of poor education'* (P048I18FZU). 5 responses mentioned that the education was too difficult with *'to much to remember'* and *'too many scientific names and laws'* (P098M24FNS).

Short courses²⁶¹ were mentioned by 5 participants. Short courses were seen generally in a positive light: *'I have learned short course. Because of it and also I help other people with my knowledge'* (P241U00MZU), however they often lack good advertising to let the public know about them *'I was unable to register other short courses due to lack of information. Lack of programmes in our community.'* (P095M25MNS). Questioning the value of education, P153P22MXH shared a deep response: *'education has brought so many different experience, some where good some were just bad they made me to actually think twice about it'*.

Content and pedagogy

Lack of hands-on experience was mentioned by 11 participants: *'by not being able to get experimental training for the engineering course'* (P004C41FTW). P036C39FZU felt her education did *'not give me more opportunity and skills'*, which was a view shared by 9 other participants. Regarding skills,²⁶² P126P26FTO mentioned the importance of character building (2) in education: *'1. to teach people good things, 2.good behaviour, 3.to respect others'*. Regarding lack of critical thinking (2), P109M20MNS expressed, *'We are taught how to cram, instead of how to analyse some of the things which matter.'* P240U20MZU similarly longed for a broader and more holistic education (1) that dealt with the politics of the country and the needs of society: *'By understand the policy of the country. By understanding the way local leve work. Understanding about the need of the public.'* P225U26FZU felt she lacked choice *'Because sometimes you cant choose what you want, we did not choose in what field we*

²⁶¹ Due to lack of funds for formal tertiary education, the idea of short courses is common in these areas. This was evident from my observations in the community centres that seemed to frequently offer some course or another. However, there is often lack of choice as it is normally an external party (like me) that decides to offer the community e.g. sewing or jewellery making, rather than what the participant wants to learn.

²⁶² The skills mentioned here are very different from the skills for employment section.

need'.²⁶³ P163P27FXH yearned for a more empowering and liberational education, *'i dont have say in things that are going to help n change or growing the world'*.

Societal and personal problems

Aspects that lie outside of the education system that impacts one's education were mentioned by 18 participants. 5 participants mentioned *'having children at early stage'* that impacted their education (P029C32FTO). 5 other participants indicated it was their own fault that their education fell short due to *'be[ing] lazy'* (P112M00FSO) or *'not submitting assignment on time'* (P194P18FTO). Other issues raised were lack of time (3), poor concentration (2), disruption from relocation (1) and lack of study permit for immigrants (1).

Resources and infrastructure

Lack of resources was mentioned by 12 participants. P064I19FZU expressed, *'by not having a good facilities where i could get help to further my education. by living in a poor communities where there are not having campaign to help the youth who came in a poor background to further their education'*. Transport issues (3) also disrupt one's educational experience: *'transport problem the school was very far and my family were unemployed to help me'* (P039C29FNS). *'Lack of sanitation'* was also raised by 2 participants (P201P23FNS).

Human support

Lack of mentorship (7), academic support (3), bad teachers (2) were mentioned, among others. P076I41MZU shared that *'Teachers were not companionate in teaching because I am a slow learner'*. P073I25FZU shared, *'ther is no one in my live like a parent'*. With lack of support, P123P18FXH often felt discouraged, *'Sometimes i feel like give uping but at the same time i think of without education i don't have life.'* Notably, 12 participants mentioned no shortfall in their educational experience,²⁶⁴ implying that they were happy with their educational experience.

5.4.4 Learning Preferences

Figure 5-5 shows ways in which participants like to learn. The two highest preferences were learning with a teacher to explain (166, 71.9%) and learning in a group (147, 63.6%). By contrast, only 30.7% of learners liked learning alone.

²⁶³ This sentiment probably comes from having to choose from limited subject choices at poorer schools, as well as accepting whatever short course or community programme that makes its way to the community.

²⁶⁴ This is different from blank responses, as they explicitly said there was no shortfall.

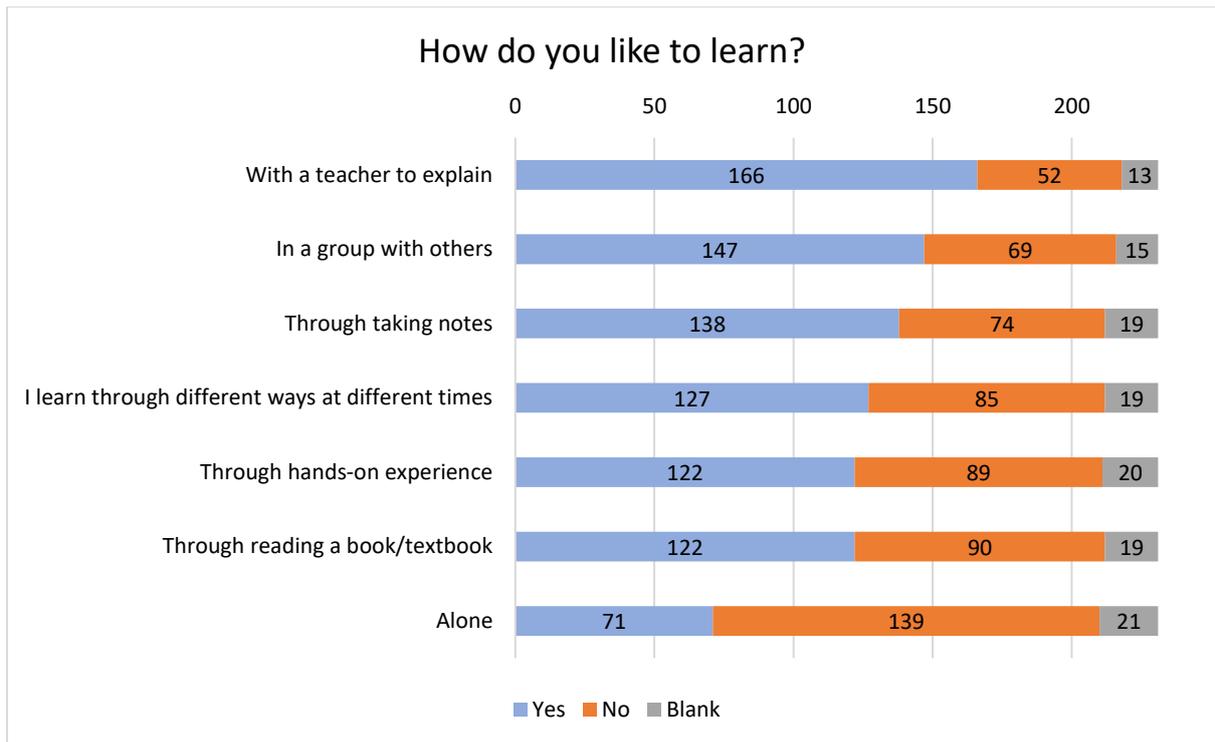


Figure 5-5 Responses to 'How do you like to learn?'

Source: Author's own

5.4.5 Learning through Online Courses

In Phases 2 and 3,²⁶⁵ participants were asked whether they would want to learn through online courses. As can be seen in Figure 5-6, 65 participants (51.6%) were open to online learning, 42 (33.3%) thought it depended on subject matter and 19 (15.1%) were not open at all.

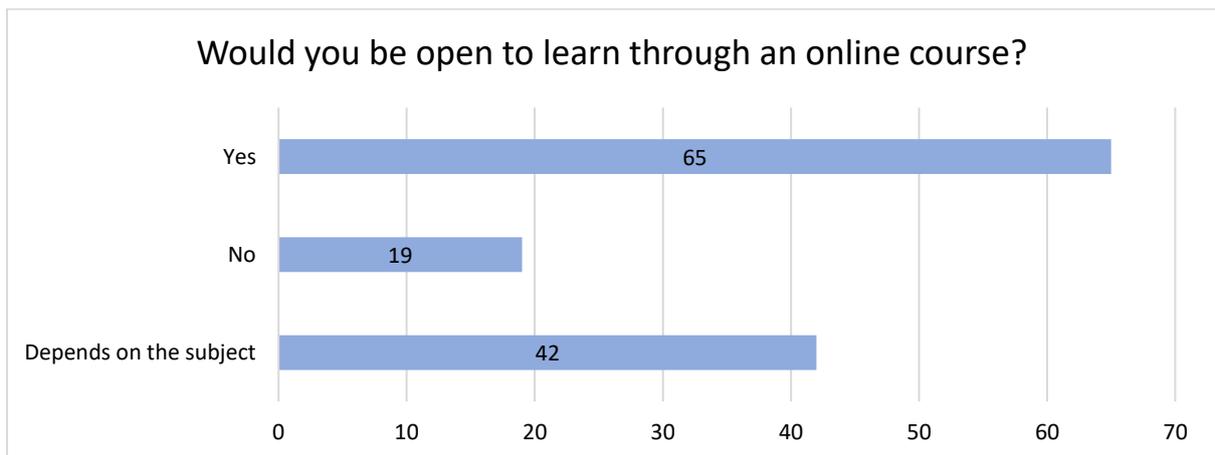


Figure 5-6 Responses to 'Would you be open to learning through an online course?'

Source: Author's own

²⁶⁵ Responses from Phases 2 and 3 included 126 respondents.

Table 5-13 gives a breakdown of various reasons regarding participants openness to learning through an online course. Although participants differed in their openness to take online courses, similar reasonings sometimes overlapped across all three opinions (i.e. yes, no, or depends), thus the reasons are mapped to the responses in Figure 5-6 and are presented together on one table.

Participants that were less inclined²⁶⁶ to online courses stated that they preferred a teacher to engage with and ask questions (11 depends, 5 no), preferred group learning in a classroom environment (1 depends, 4 no), preferred practical, hands-on learning (2 depends, 3 no), and were concerned that they might be scammed (3 no). The concern for being scammed correlates with the observations raised in Section 5.2 about the need for internet literacy, beyond computer literacy.

Answers more inclined²⁶⁷ towards pursuing online learning thought that it would bring flexibility (14 yes, 1 depends), ease and efficiency (14 yes), quick to access knowledge (3 yes),²⁶⁸ opportunity to learn more through online (3 yes), save money (2 yes),²⁶⁹ and improve job prospects (2 yes) and among other reasons. Those that had confidence in their ability to learn independently (5 yes), had undertaken distance learning (2 yes), or liked experimenting (3 yes), were more open to online learning.

Some participants mentioned reasons that were similar although they differed on their willingness to learn through an online course²⁷⁰ such as needing more information about online learning (2 yes, 3 depends, 2 no) and fearing not understanding the course (1 yes, 1 depends, 1 no). Technological concerns such as lack of hardware (1 yes, 3 depends, 1 no), connectivity (1 yes, 3 depends, 1 no), and computer literacy (1 yes, 3 depends) were raised, however, they were not ranked as highly as aforementioned pedagogical and convenience factors. In fact, 2 participants looked at online courses as an opportunity to improve their computer literacy.

²⁶⁶ The 'less inclined' grouping comprises of reasons where participants responded with 'depends' and 'no' i.e. the weighting was towards a no.

²⁶⁷ The 'more inclined' grouping comprises of reasons where participants responded with 'depends' and 'yes' i.e. the weighting was towards a yes.

²⁶⁸ It would also free up time as one would not need to travel and could study in flexible hours.

²⁶⁹ This is because the courses would not only save fee money, but also transport money to the education institute.

²⁷⁰ These reasons were weighted in the centre, where 'depends' was the most frequent response.

Table 5-13 Reason for wanting/not wanting to learn through online courses

Why would you, or would you not, be open to learning through an online course?	Description	Example	Would you be open to learning through an online course?			Total
			Yes	Depends	No	
Teacher	Needs a teacher and needs to ask questions	"I want a teacher in front of me so that i will be able to understand more" (P134P26FZU)	0	11	5	16
Flexibility	Saves time, can work and study, reduces travel time	"I can work and learn through online" (P242U00FZU)	14	1	0	15
Easier	Perceived as easier/more efficient	"Online make life easy" (P230U33FZU)	14	0	0	14
Information needed	Require more information about online courses	"because now i dont have information about learning on line" (P165P30FVE)	2	3	2	7
Depends	Depends on the subject and guidance needed	"some subject are very hard need guidance" (P211U22MZU)	0	6	0	6
Classroom environment	Prefer group learning/classroom environment	"I like learning in a class for incase ,I need some help during my course" (P132P36FTW)	0	1	4	5
Connectivity	Concerns of network connectivity & data costs	"Because of data and the network sometimes doesn't work well" (P245U19MZU)	1	3	1	5
Need practical	Prefers hands-on, practical learning	"I prefer hand on learning" (P177P23FXH)	0	2	3	5
No hardware	No computer or smartphone	"it because idont have smart phones or laptop" (P260)	1	3	1	5
Self-directed learner	Already a self-motivated, independent learner	"I'm a fast learner so I don't mind learning online" (P237U32FZU)	5	0	0	5
Not tech-savvy	Not computer literate enough	"am not perfect on using computer" (P184P32FNS)	1	3	0	4
Quick access to knowledge	Instant access to world of knowledge	"Because it easy access information it saves a lot" (P215U30FZU)	3	0	0	3
Experimental	Likes to try to things	"because i like to try many thing in my life" (P200P28FZU)	3	0	0	3
Learn more online	Learn more online than in textbooks	"Becouis u learn more infonmetion than book" (P199P22FZU)	3	0	0	3

Scam	Concerned they might be scammed	"i would not know that its a scam or not" (P179P22FTO)	0	0	3	3
Won't understand	Concerned they cannot understand alone	"because i wont understand some of the things" (P190P22FSW)	1	1	1	3
Cheaper	It will be cheaper	"Because it saves interms of spendings" (P205U32FZU)	2	0	0	2
Experience with distance learning	Prior experience with distance education	"because i'm used to self driving as i also did my degree through distant learning" (P159P41FXH)	2	0	0	2
Improve job prospects	Will improve job prospects	"I would love to gave extra skills while I am looking for a job" (P140P24FZU)	2	0	0	2
Full time	Prefer to learn full time in a class	"i want full time course to know more information" (P130P24FNS)	0	1	1	2
Opportunity to increase computer literacy	Opportunity to increase computer literacy	"It will gave me a chance to learner how to studying a computer" (P225U26FZU)	2	0	0	2
Teach others	wants to learn to teach others	"I would, just to teach others" (P207U26FZU)	1	1	0	2
Difficult	Concerns of difficulty	"Its can be difficult" (P248U20MZU)	0	1	0	1
Digital age	Embracing the digital age and digitalising learning	"because at the age of this its asimply way to do it" (P180P27FTO)	1	0	0	1
English	Concerns of language barriers	"Because of my English" (P243U00FZU)	0	1	0	1
Helpful	Perceived as helpful	"it is going to help me" (P126P26FTO)	1	0	0	1
Not online	Subject knowledge not online	"Because most of my subject are writhing in papers" (P220U29FZU)	0	1	0	1
Notes	Prefers note taking	"some you have to take notes" (P150P24FTO)	0	1	0	1
Privacy	Concerned about privacy	"private matters" (P158P23FTO)	0	1	0	1
Smartphone access	Has smartphone access	"Because i do have a smartphone" (P170P31FSO)	1	0	0	1

Source: Author's own

5.5 Technology Survey Findings

The aim of the Technology Survey was to ascertain the role of technology in the lives of the participants, as well as their perceived value and importance of it.

5.5.1 Access to Computers and Internet

Figure 5-7 outlines where participants access computers and the internet. The most common answer (153, 65.1%) was ‘at an internet café’, followed by ‘at a library’ (199, 50.6%). The same pattern was seen in terms of internet access, where 131 participants (55.7%) used internet cafes and 97 (41.3%) used libraries to access the internet. 57 participants (24.3%) indicated they owned a computer. 52 participants (22.1%) indicated they had access to internet at home, but whether this is cellular or fixed connection is unknown. The least likely place to access a computer (22, 9.4%) or internet (19, 8.1%) was at work indicating either that participants are unemployed or do not do jobs that involve computers.

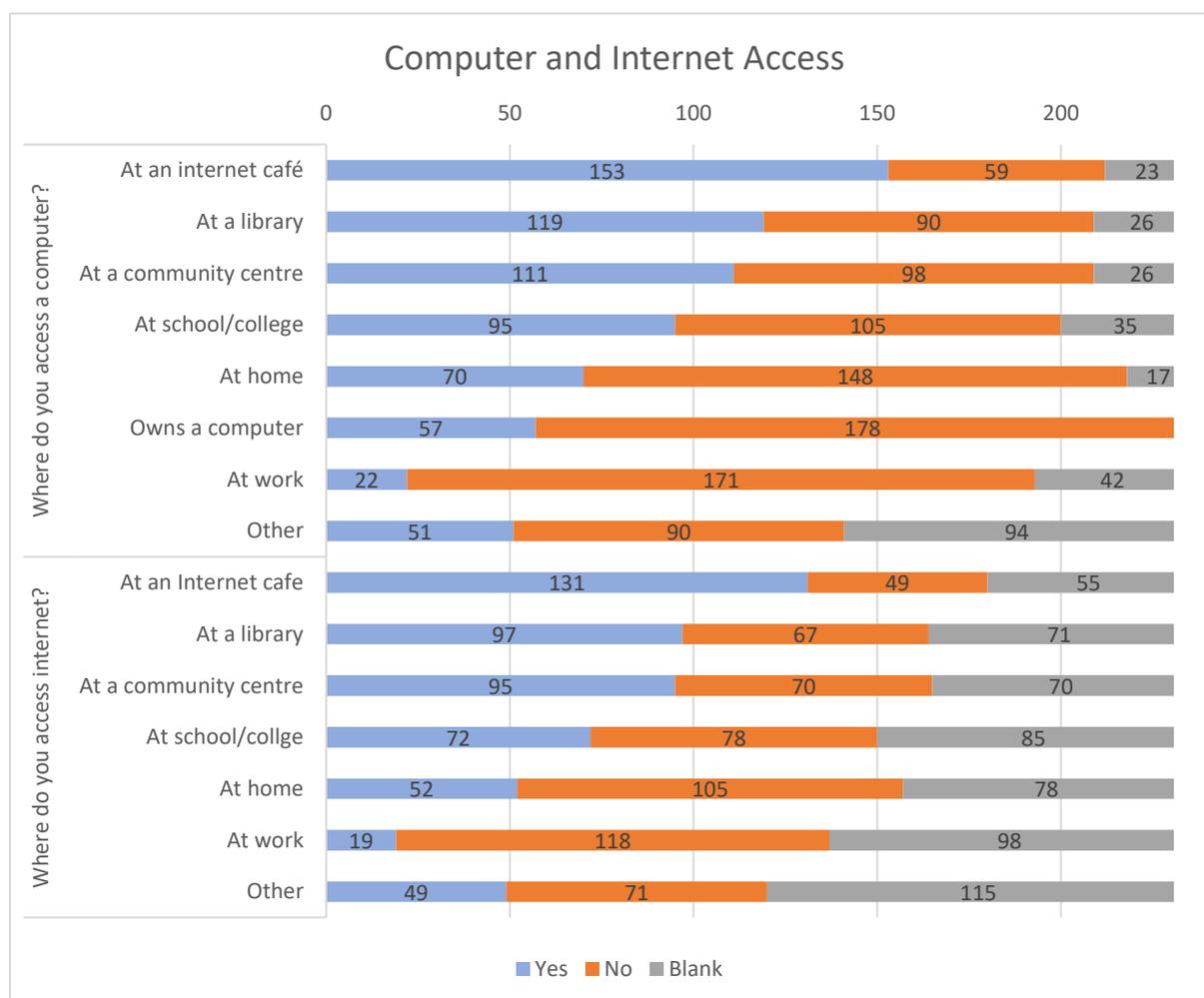


Figure 5-7 Access and ownership to computers and internet

Source: Author's own

5.5.2 Ownership of Mobile/Smartphones

Participants' ownership of mobile phones or smartphones is presented in Figure 5-8 and Figure 5-9. 202 participants (86%) had access to a mobile phone, while 176 (75%) had access to a smartphone. A further 13 (6%) more had mobile phone access through a friend or family, and 34 (14%) more had smartphone access through a friend or family. This can be compared to the 2019 report from Independent Communications Authority of South Africa (ICASA) stating 81.72% smartphone penetration (ICASA 2019).²⁷¹

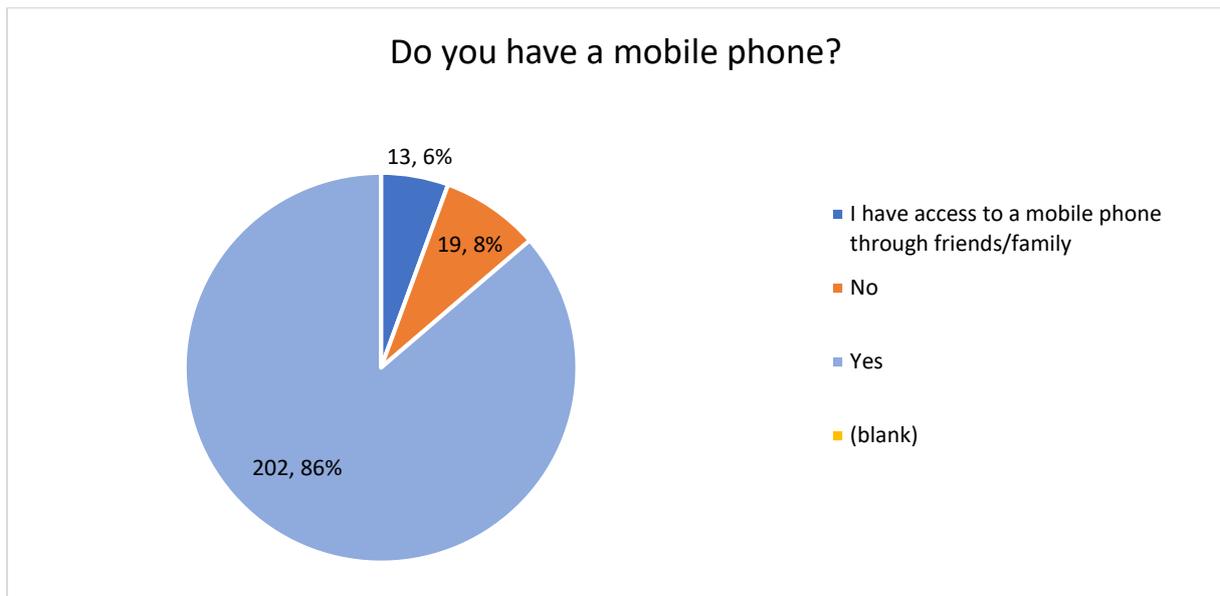


Figure 5-8 Responses to 'Do you have mobile phone?'

Source: Author's own

²⁷¹ Pew Research Center offer a more nuanced analysis, stating 34% mobile penetration for those with less than secondary education, and 75% for those with secondary education or more (Silver and Johnson 2018). Since 94.8% of participants have a secondary education or more, the data correlates with Pew Research findings.

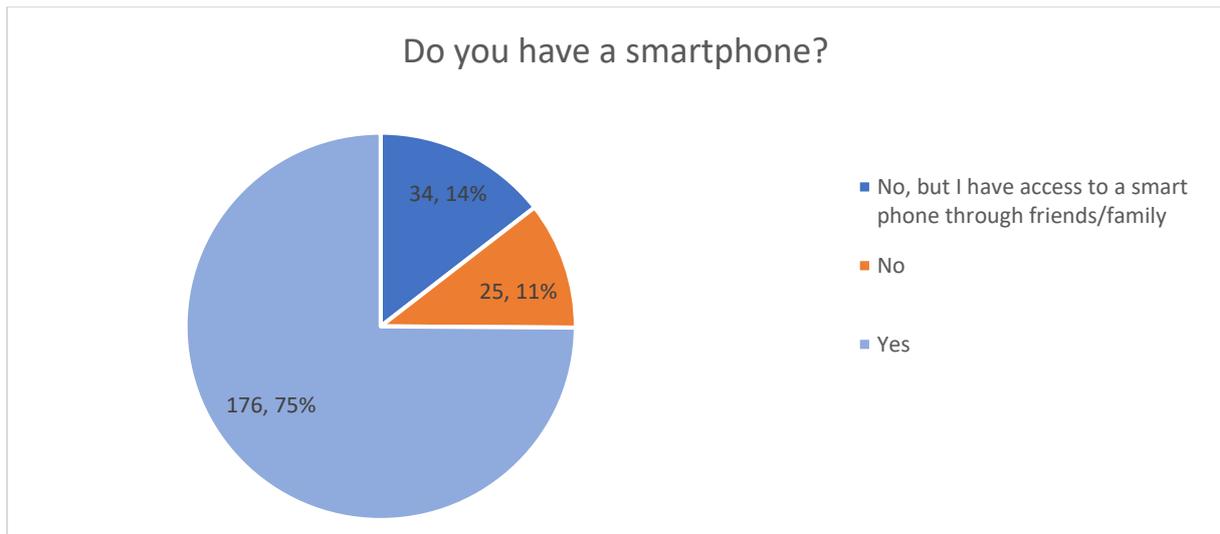


Figure 5-9 Responses to 'Do you have a smartphone?'

Source: Author's own

5.5.3 Frequency of use of Phones and computers

Figure 5-10 indicates the self-reported frequency of use of mobile/smartphones and computers by the participants. Phones are much more frequently used, with 125 participants (53.2%) indicating using phones for more than 4 hours every week day, in comparison to only 44 participants (18.7%) using computers for more than 4 hours every week day.²⁷² The use of computers is more evenly distributed over the different frequency ranges, whereas phone usage is more polarised between very frequent use, or no use at all (33, 6.8%). 13.6% of participants report never using computers.

²⁷² There were 110 respondents in total, from Phases 1, 2 and 3.

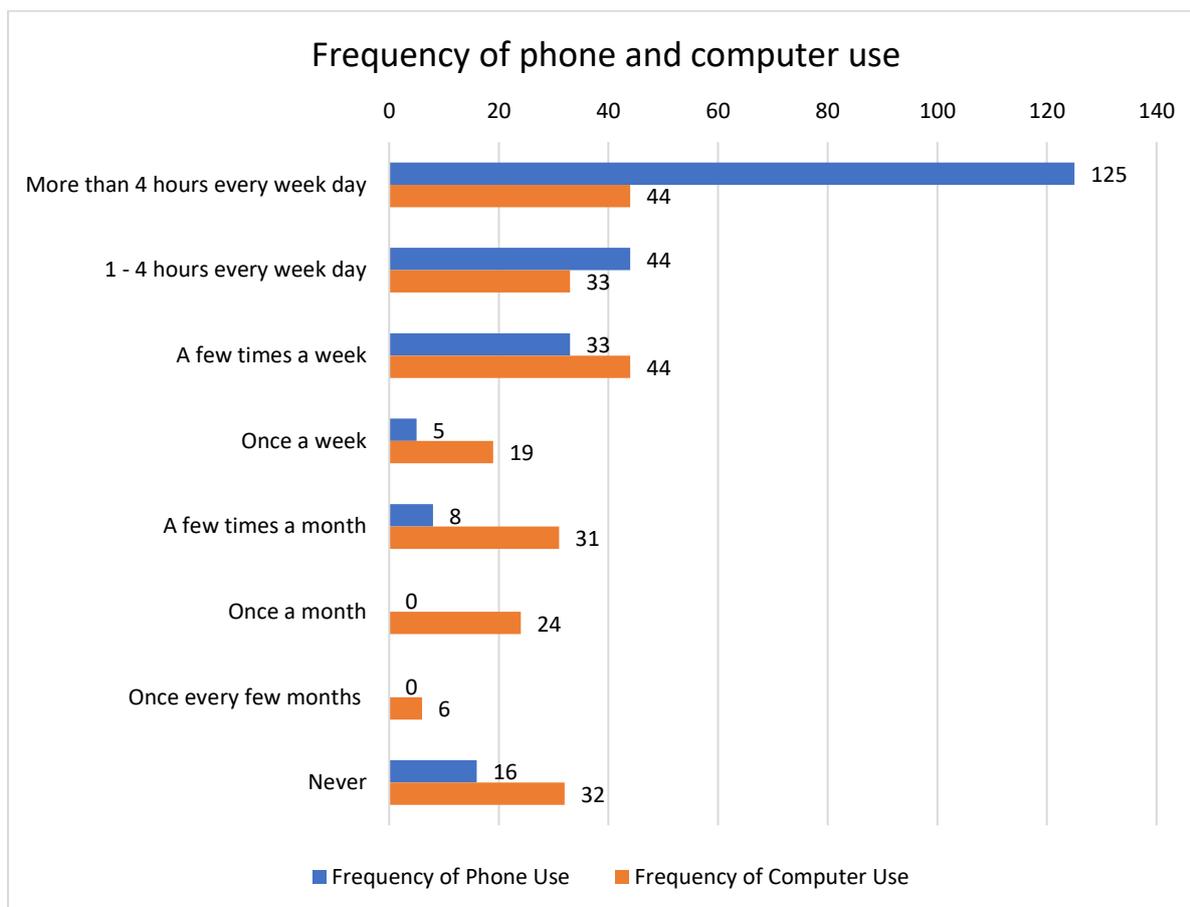


Figure 5-10 Frequency of phone and computer use

Source: Author's own

5.5.4 Importance of Phones: open-ended question

In Phase 1, participants were asked whether mobile/smartphones improved their quality of life. 95.4% respondents²⁷³ responded positively that mobile/smartphones improve one's quality of life²⁷⁴ thus their justifications, outlined in Table 5-14 and Table 5-15, are positively phrased. This was an open-ended question that was only asked in Phase 1.²⁷⁵

Overall, responses covered overlapping themes of easy access to information/services (113), connection to the world (27), communication (15), specific useful features (13) and other uncategorised reasons (8).

²⁷³ There were 110 respondents in total.

²⁷⁴ This question was asked in the positive and that could have added to some bias.

²⁷⁵ Not all Phase 1 participants responded with a reason, and some responded with more than one reason. This question was turned into a predefined list in Phases 2 and 3.

Table 5-14 Aggregated responses to 'Why does a mobile/smart phone improve one's quality of life?'

Mobile/Smartphone: Why does it/ does it not improve ones quality of life? (aggregated)	Frequency
Easier access to information/services (A)	113
Connection (Con)	27
Communication (Com)	15
Useful features/applications (U)	13
Other (O)	8

Source: Author's own

Table 5-15 Thematic responses to 'Why does a mobile/smart phone improve one's quality of life?'

Mobile/Smartphone: Why does it/ does it not improve one's quality of life?	Code	Frequency
Browsing the internet	A	35
Accessing information	A	21
Feeling connected to the world	Con	19
Job searching	A	16
Communicating	Com	11
Makes life easy/efficient	A	10
Following the news	A	9
Immediate information	A	8
Improves life	O	6
Many useful features	U	5
Accessing emails	A	4
Having a social life	Con	4
Connecting to social media	Con	4
Long distance communication	Com	3
Portability	U	3
Supporting study	A	3
Information storage	A	2
Improving access to everything	A	2
Improving access to basic needs	A	1
Using it like a computer	O	1
Playing games	U	1
Living in world of technology	O	1
Listening to music	U	1
New different activities	U	1
Online banking	U	1
Online shopping	U	1
Accessing opportunities	A	1
Useful in emergency	Com	1
Knowing the weather	A	1

Source: Author's own

In terms of easier access to information (113), a unique response was searching for jobs (16). This shows how systems have changed, such that access to internet has become important if

one is searching for a job, as most jobs are advertised online. Other information that participants mention receiving through their phones was the news (9 mentions). Only 4 participants mentioned using mobiles to access their email, and this low mention correlates with the observations in Section 5.2. In general, participants highlighted the efficiency (10) and immediacy (8) of being able to access information on their phones. Only 3 participants felt that phones supported their studying, and 2 others mentioned its ability to store information.

The category of ‘connection’ overlapped with having access to information but was treated as a separate category due to emphasis on being connected with people rather than accessing information. Connection to a global community (19), social media (4) and its use having in social life (4) were highlighted. The term connection thus also overlapped with those that specifically emphasised communication in general (11), and long-distance communication (3).²⁷⁶ A participant mentioned that a phone is particularly useful when in an emergency. Other features (13) of mobile phones were mentioned such as being able to play games, listen to music and engage in new different activities.

5.5.5 Importance of Phones: predefined list

Figure 5-11 shows responses to a predefined list of mobile/smartphone uses and benefits presented in Phases 2 and 3.²⁷⁷ The most essential uses/benefits of a mobile phone was searching for jobs (77), supporting studies (63) and making life easier/more efficient (60). The question was unclear as to whether participants presently use mobile phones for these purposes or would like to use mobile phones for these purposes. This may have explained the high response for accessing emails (59), as many participants didn’t have emails to access. Listening to music (26) was near the bottom of the list in terms of essentiality, however that does not imply that the phone is not frequently used for this; the question of importance versus time spent using a specific feature, are different questions.

²⁷⁶ The use of Voice over Internet Protocol (VoIP), such as on WhatsApp, has drastically reduced the cost of making calls and communicating with others.

²⁷⁷ This was informed by the open-ended Phase 1 questions, with minor alterations. Minor alterations included removing general comments such as ‘Improves Life’, ‘Many Useful Features’ and ‘Living in a world of technology’ which don’t deal with a specific use or benefit.

How essential are the following uses/benefits of SMART/ MOBILE PHONES in terms of improving your quality of life?

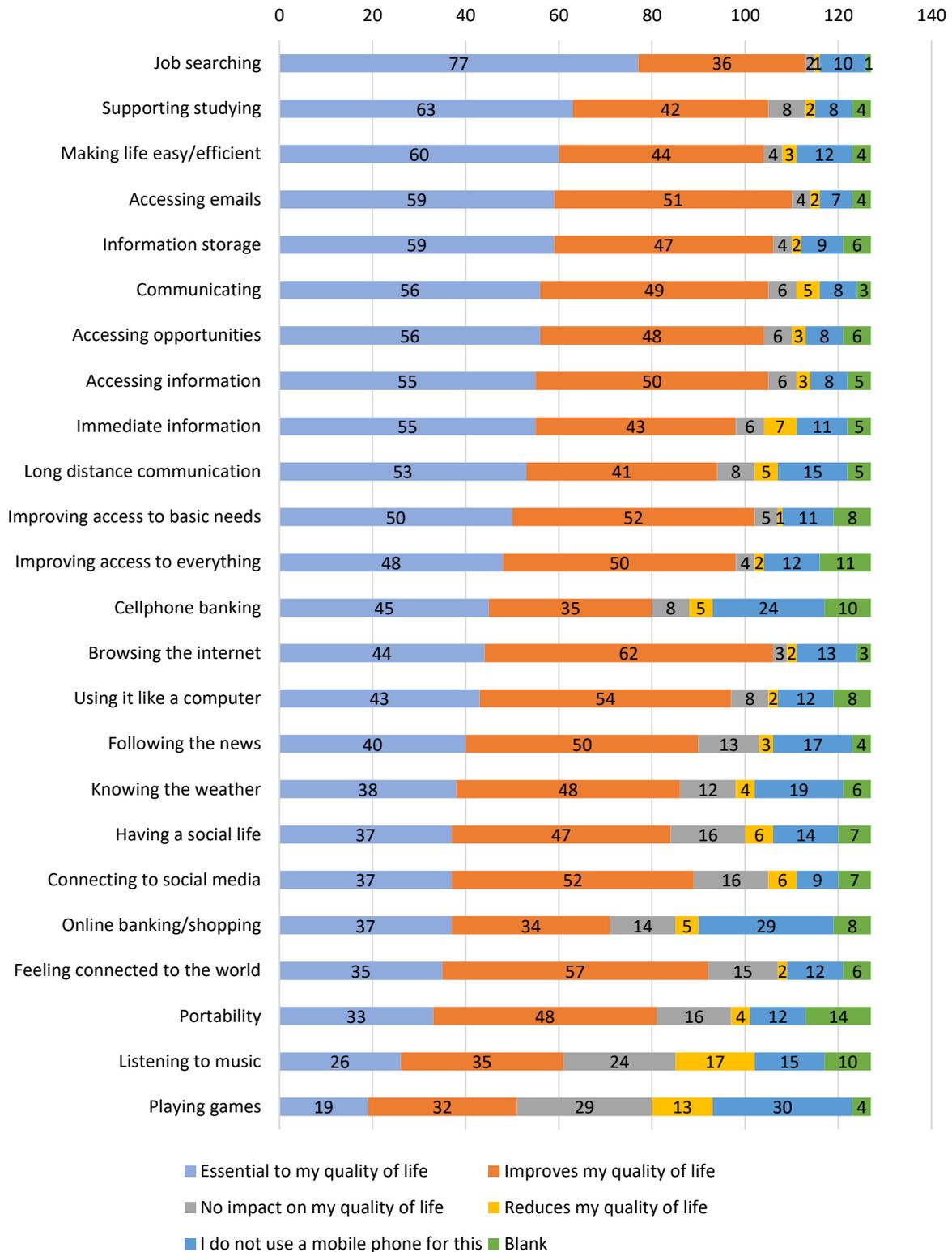


Figure 5-11 Responses to 'How essential are the following uses/benefits of smart/ mobile phones in terms of improving your quality of life?'

Source: Author's own

When participants were asked if anything was left out of the table, they mentioned being able to watch videos and movies, as well as record videos and take photos. P140P24FZU phrased this as *'capture moments with family'*, emphasising the human and social aspect, rather than the technological feature. Other interesting uses were airtime and money transfer, business marketing and or marketing oneself. Some participants also gave further information to the types of information they were accessing, ranging from bible verses to trending gossip, as well as career information and educational opportunities. Using phones to find locations through maps was also mentioned.

5.5.6 Importance of Computers: open-ended question

Phase 1 participants were asked an open-ended question about whether computers improve one's quality of life. 88.2% of them stated that computers improve one's quality of life.²⁷⁸ The reasons of why a computer improves one's quality of life is shown in Table 5-16 and Table 5-17.

In comparison to Table 5-14 on phones, Table 5-16 highlights that computers were less used for easier access to information/services (58) and connection/communication (5). Computers were more likely to be used for storage of information (7) than mobile phones were (2).

Looking at Table 5-16 and Table 5-17, the reasons of how computers eased access to information were similar to the reasons given for phones. Computers were particularly useful in the search for employment (45), which encompasses job searching (23), CV typing (9), submitting applications (9) and gaining computer skills that would improve employability (4). 24 participants mentioned that computers support studies and learning, with specific mentions to typing assignments (4), research (3), reading books (2), and changing mindsets (1). 24 responses were related to improving computer skills itself as benefit, such as typing (15 mentions) and computer literacy (9 mentions). In other words, a reinforcing logic was used as computers were beneficial because you could learn computer skills with them. Other useful features that were mentioned included document scanning, entertainment, and online shopping and online banking.²⁷⁹

²⁷⁸ There were 110 respondents in total.

²⁷⁹ Features such as online shopping, online banking and job searching are digitised forms of activities that previously were done without information technology, but their digitised versions are becoming more normalised as they make processes faster and more efficient. As norms change, what is required to meet certain needs, such as finding a job, changes (See Section 3.3.2).

Table 5-16 Aggregated responses to 'Why does a computer improve one's quality of life?'

Computer: Why does it/ does it not improve one's quality of life? (aggregated)	Code	Frequency
Easier access to information/services	A	58
Supports employment search	Em	45
Supports studies and learning	L	24
Improves computer skills	S	24
Other	O	6
Connection and Communication	Co	5
Useful features/applications	U	4

Source: Author's own

Table 5-17 Thematic responses to 'Why does a computer improve one's quality of life?'

Computer: Why does it/ does it not improve one's quality of life?	Code	Frequency
Job searching	Em	23
Accessing Information	A	17
Typing	S	15
Supports studies	L	14
Browsing the internet	A	11
Typing CV	Em	9
Submitting applications	Em	9
Improves computer literacy	S	9
Makes life easier	A	7
Information storage	A	7
Emails	A	4
Improves employability	Em	4
Typing assignments	L	4
Connecting with people	Co	4
Working from home	A	4
Can do anything I want	O	3
Research	L	3
Improves quality of life	O	3
Accessing News	A	2
Reading books	L	2
Saves money	A	2
Saves time	A	2
Communication	Co	1
Document scanning	U	1
Entertainment	U	1
Immediate Information	A	1
Internet Access	A	1
Mindset Change	L	1
Online Banking	U	1
Online Shopping	U	1

Source: Author's own

5.5.7 Importance of Computers: predefined list

Figure 5-12 shows the responses from Phases 2 and 3, where participants were given a predefined list of uses/benefits of computers to choose from.²⁸⁰ Like Figure 5-11, participant responses related to potential benefits of computers, rather than current benefits.²⁸¹

Once again, the use of computers in the search for employment rose to the top of the tables in terms of essentiality, with mentions of CV typing (89), submitting applications (87) and job searching (86).

Educational benefits also featured strongly regarding research (80) and supporting studies (73). Reading books (43 mentions) and entertainment (35 mentions) were the least essential on the list.²⁸²

²⁸⁰ The predefined options were gathered from Phase 1.

²⁸¹ For example, 62 participants responded to working from home due to having a computer, which is unlikely and contradicts other data.

²⁸² Once again, the phrasing of the question ranked how *essential* the listed uses were, and not how *frequently* they would use a computer for each task. These are different questions.

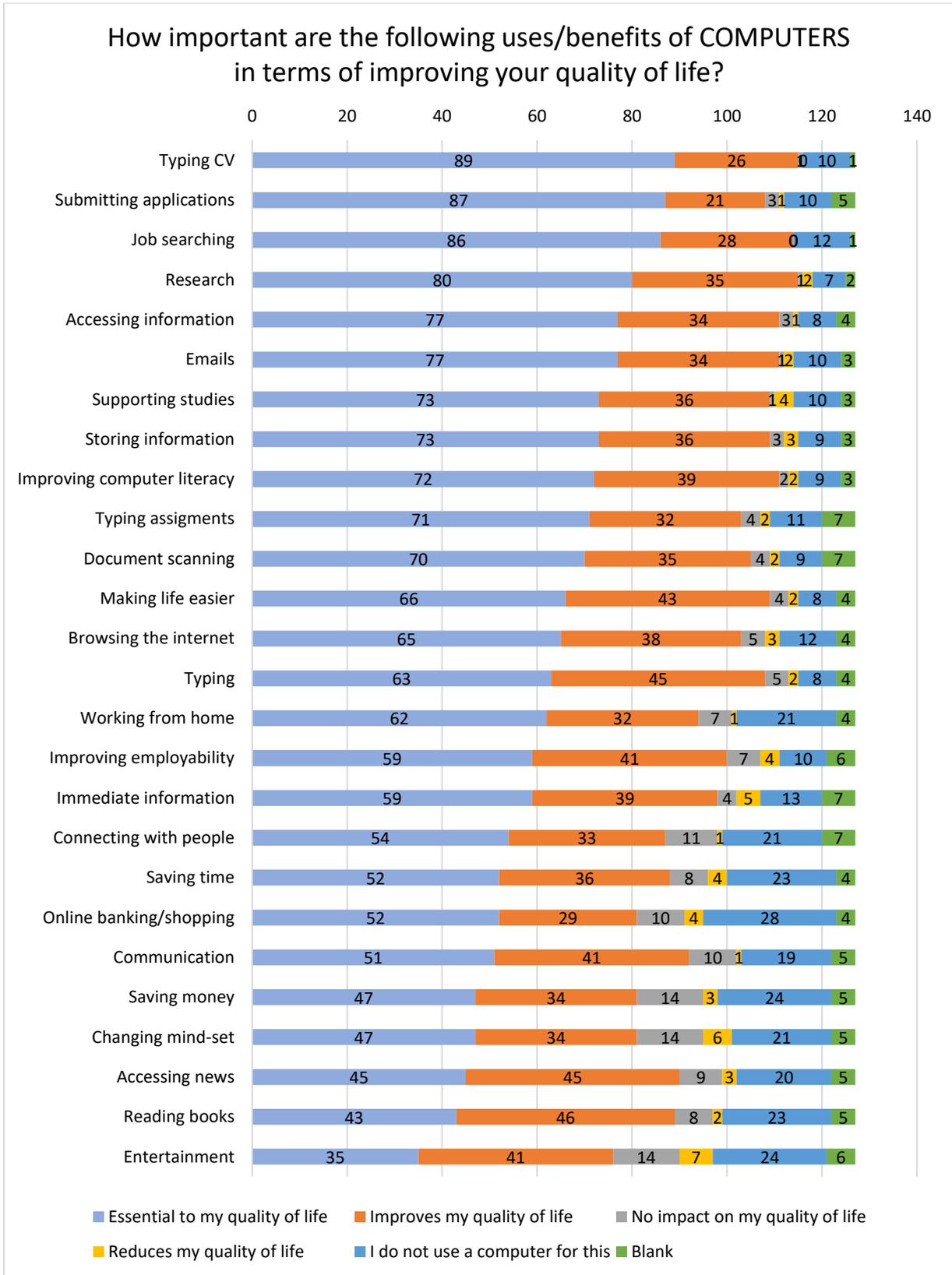


Figure 5-12 Responses to 'How important are the following uses/benefits of COMPUTERS in terms of improving your quality of life?'

Source: Author's own

5.5.8 Digital Learning Preferences

Before the online course was done, the participants were asked about their digital learning preferences. Figure 5-13 shows that 219 (94.81%) participants preferred learning with technology assisting them as opposed to without it.

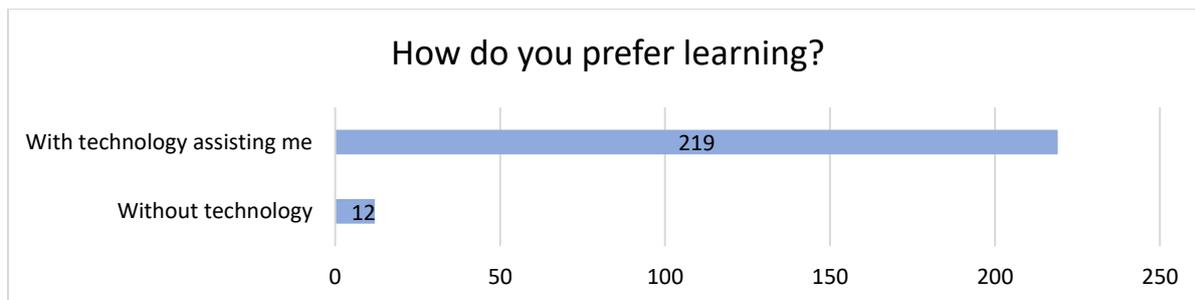


Figure 5-13 Responses to 'How do you prefer learning?'

Source: Author's own

When asked if they like learning through videos, 75 (32.2%) said yes, 129 (55.4%) said sometimes, and 29 (12.5%) said no, as can be seen in Figure 5-14.

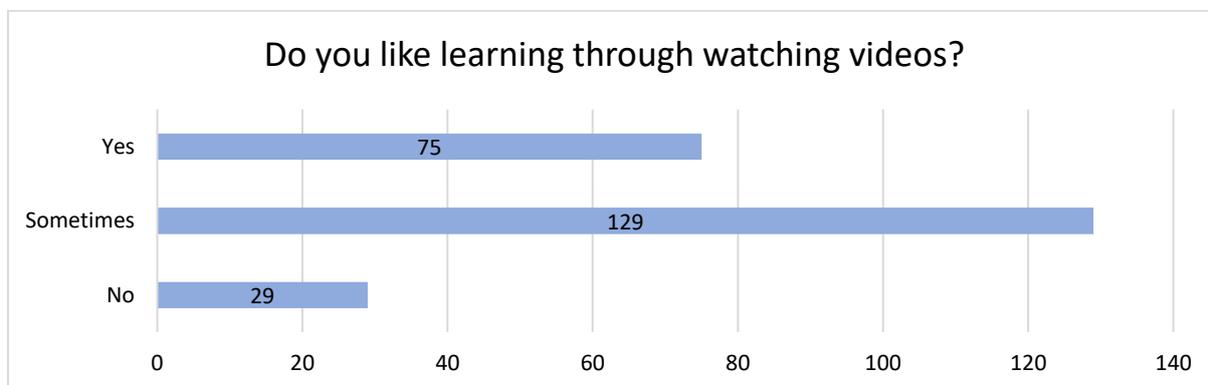


Figure 5-14 Responses to 'Do you like learning through watching videos?'

Source: Author's own

5.6 Feedback Survey Findings

Whilst the Feedback Survey collected opinions related to the holistic experience of the online course, including reflections on the course content itself, the data and analysis here focuses mainly on generalisable comments beyond the content.

5.6.1 General Experience

Overall, participants seemed to enjoy their experiences on the course, with 168 (79.2%) rating their overall experience of the course as a 4/5 or 5/5 in Figure 5-15. Of the four questions asked, the question on relevancy to context indicated that there was room for improvement on making the courses more relevant in this regard.

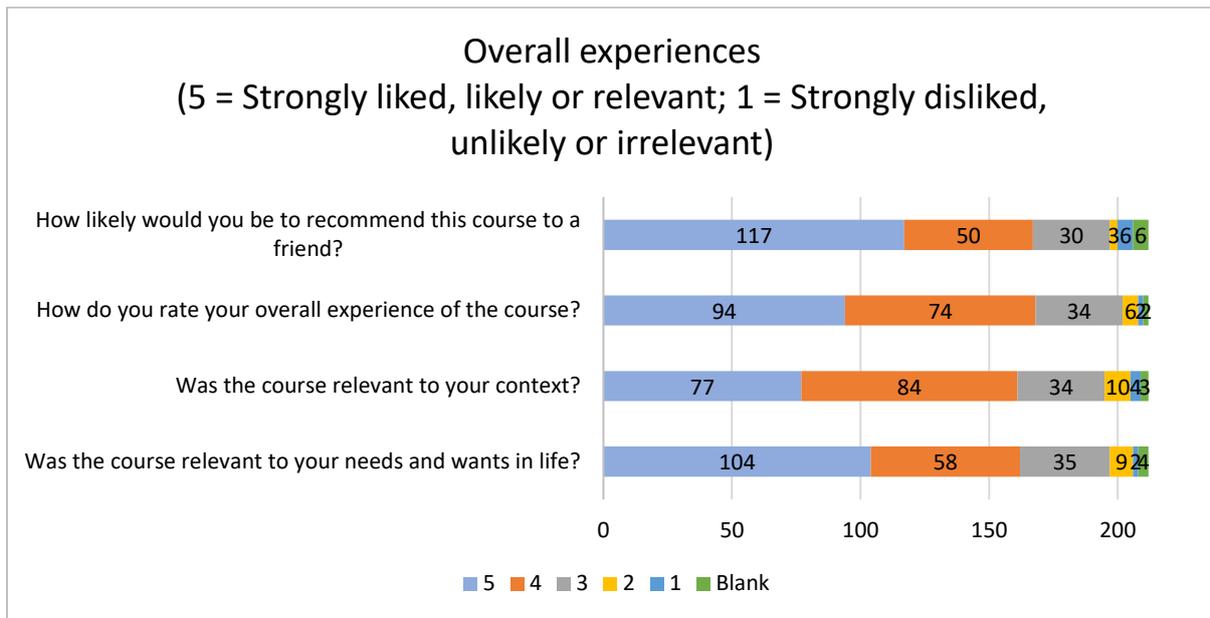


Figure 5-15 Overall experiences of the course

Source: Author's own

5.6.2 Language Preferences

Figure 5-16 indicates to what extent participants understood the vocabulary in the course. 140 participants (66.0%) understood most or all of it, while 68 (32.1%) struggled.²⁸³

²⁸³ The Feedback Survey had 212 responses, thus all percentages in this section are based on this.

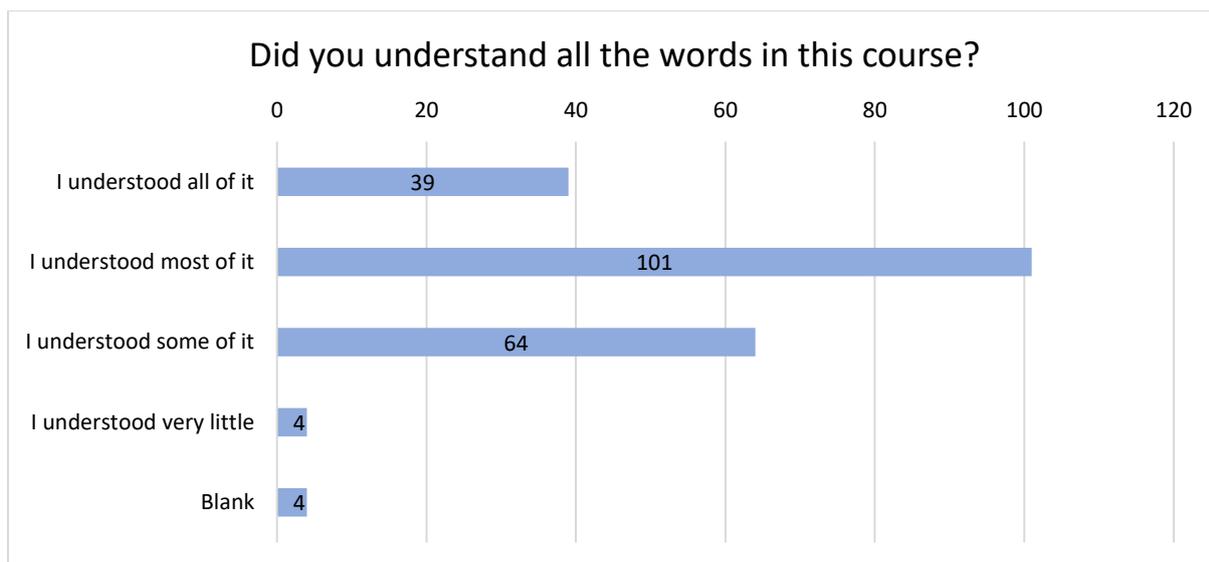


Figure 5-16 Responses to 'Did you understand all the words in this course?'

Source: Author's own

In the suggested improvements question (see Table 5-18), 4 mentions were made to 'use simple English' (P093M30FNS). When participants were asked what words they found difficult, 'chronological' and 'decolonisation' were mentioned most frequently. However, the meaning of both of these words were taught in the course, as opposed to expecting the participant to know them. In addition, most of the difficult words that were mentioned in the course were to teach participants more descriptive vocabulary for writing a CV. This can be seen in Figure 5-17, an example of one of the exercises describing types of skills. It is possible that too many new words and concepts were introduced at once, and thus participants felt too overwhelmed with the new vocabulary as well as the new content. A balance needed to be struck in terms of building on previous knowledge and introducing new concepts or words, but this was hard to ascertain in a static online course that was aimed at learners of varying educational levels.

Skills: Employable Skills Self-Assessment

Define your employable skills by placing a check mark in the box to each skills that you have used in any work or academic setting. Think carefully before concluding that you have never used the skill. Then review the checked skills, and on a separate sheet make note of the most developed and that you would enjoy using on the job. Refer to this exercise when writing your resume and cover letter.

This is a self-evaluation question, with no right or wrong answer. Select your employable skills, to help you identify your strengths:

- Administer – Perform day-to-day tasks such as maintaining information files and processing paperwork.
- Advise / Counsel / Consult – Provide guidance, support, or expert advice to individuals or groups.
- Analyze – Identify the underlying principles, reasons, or facts by breaking down information or data into separate parts.
- Appraise / Assess – Estimate or evaluate the value, importance, or quality of an object or real estate.
- Assemble – Put or piece together parts of an object or information.
- Assist / Treat – Provide personal assistance, medical attention, emotional support, or other care to others such as coworkers, customers, or patients.
- Budget – Determine how money will be spent to get the work done, and account for these expenditures.
- Build a team – Encourage and build mutual trust, respect, and cooperation among team members.
- Build relationships – Develop constructive and cooperative working relationships with others, and maintain them over time.

Figure 5-17 Example of skill exercise

Source: Author's own

Participants were asked whether they prefer the content to be taught in their home language or English. As can be seen in Figure 5-18, 164 participants (78.8%) preferred English. This preference for English will be discussed further in Section 6.4.2.

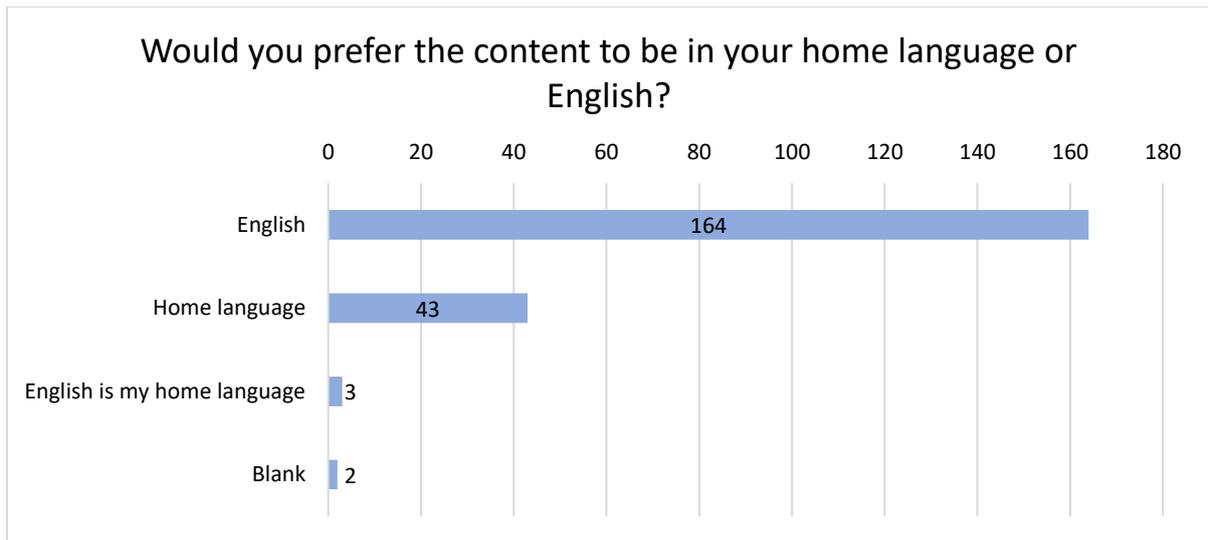


Figure 5-18 Responses to 'Would you prefer the content to be in your home language or in English?'

Source: Author's own

5.6.3 Suggested Improvements

In response to the question of how one would improve the course, participants shared much more general and pedagogical suggestions. A thematic summary of the suggested improvements can be seen in Table 5-18.

Table 5-18 Suggested improvements

Suggested Improvements	Code	Frequency
Prefer shorter course	Length & Level	18
Nothing needs to be changed	Nothing	15
More time to complete course	Length & Level	13
More videos	Content format	9
More classroom, oral and non-digital interaction	Interactivity	7
More small group tasks	Interactivity	6
Shorter and fewer questions	Length & Level	6
Computer skills needed first	Barriers	4
Simpler language and instructions	Barriers	4
Fix and improve video-playing	Content format	3
Ensure the course reaches others	Barriers	3
More one-on-one personal support	Guidance	3
More graphics and visual aids	Content format	3
Provide more content	Length & Level	3
Control class rowdiness	Guidance	2
Provide more examples	Length & Level	2
Provide more facilitators to assist	Guidance	2
Include more quizzes and feedback	Interactivity	2
Include other language options	Barriers	2
Limit screen time for those with eye difficulties	Barriers	1

Include harder questions	Length & Level	1
Improve the quality of the images	Content format	1
Make it less mentally exhausting	Length & Level	1
Include more articles	Length & Level	1
Include more audio	Content format	1
Have more rests and breaks	Length & Level	1
Provide more computers	Barriers	1
Provide more instructions and guidance	Guidance	1
Have more class lessons and teaching	Interactivity	1
Remove videos	Content format	1
Include more summaries	Length & Level	1
Make use of class instruction and projector more	Interactivity	1

Source: Author's own

Length and level of course

The comments on shortening the course (18), having more time (13), and shortening questions (6) were very apt. Due to time-consuming activities such as setting up email addresses or fixing the internet connection, there was reduced time for participants to work. There were, however, a few suggestions to have *more* content, lessons, examples and articles, which indicated that some participants wanted to increase their depth of understanding. This highlights contradictory suggestions based on different education and self-directed learning levels.

Guidance

Some participants wanted more one-one-one support (3), more control of the class (2), more facilitators (2) and more instructions and guidance (1). One of the parts of the course that was enjoyed the most was '*[w]hen the instructor was presenting*' (P095M25MNS). This was normally done when I explained something practically using the projector, whilst engaging the class. This style was appreciated by P102M25FNS, who suggested interaction '*[b]y operation via a projector for everyone to understand and work as a team*'. Others would have preferred facilitators to '*[m]onitor each and every student of the course*' (P113M21MBL). Also required of a facilitator was to control the class: '*The students must have order to make it easy to learn it was a bit loud*' (P023C20FNS). These types of requests show andragogic approaches, as described by Crosslin (2016), do not suit the participants despite them being adult learners; they prefer considerable educator support and guidance.

Classroom interaction

What came out strongly in this question was the desire to have more classroom interaction (7), more group work (6 mentions). All of these suggestions alluded to the need for more human interaction and mentorship, as opposed to self-directed, autonomous learning. P116M30MNS enjoyed *'having group discussion'*. P001C24FZU suggested including non-digital learning: *'not to make everything computer based. its tiring sitting in front of the computer for a long time'*. Similarly, P221U42MZU suggested that *'[s]ometimes we can do oral exercise so we can not forget'*. P138P26FZU suggested *'being more engaging than just having to answer the questions online'*. The participants were not used to spending a day in front of a computer, and this can be exhausting, as highlighted by P108M33FNS, *'my mind is tired reading the notes'*. Limitations to utilising online courses were mentioned such as lack of computer skills (4), language (6), and difficulty for people with disabilities (1). P099M24FNS stated, *'[I] think the course is great but not for people with eye defects that cannot stand computer screen for too long'*.

While participants requested more interaction, it is worth mentioning that the original blended-learning approach did include these aspects, but these fell away due to different levels of computer literacy and education in the classes. Also, given the amount of basic support that was needed in the class, there was little time for deeper one-on-one engagement or prompting critical thinking.

5.6.4 Learning Preferences

In rating the different learning methods offered in the course in Figure 5-19, participants found receiving their test results the most beneficial. This may be because participants have seldom gotten feedback from their overworked teachers and poor-quality education. There was much more excitement and liveliness when participants got to the quizzes, multiple choice questions and end-line tests that gave feedback, as opposed to the self-evaluative and planning exercises. This indicates that gamified learning would further incentivise them as they enjoy immediate feedback. Participants, however, began to by heart the correct answers if they needed to resubmit, rather than truly understanding the rationale behind it.

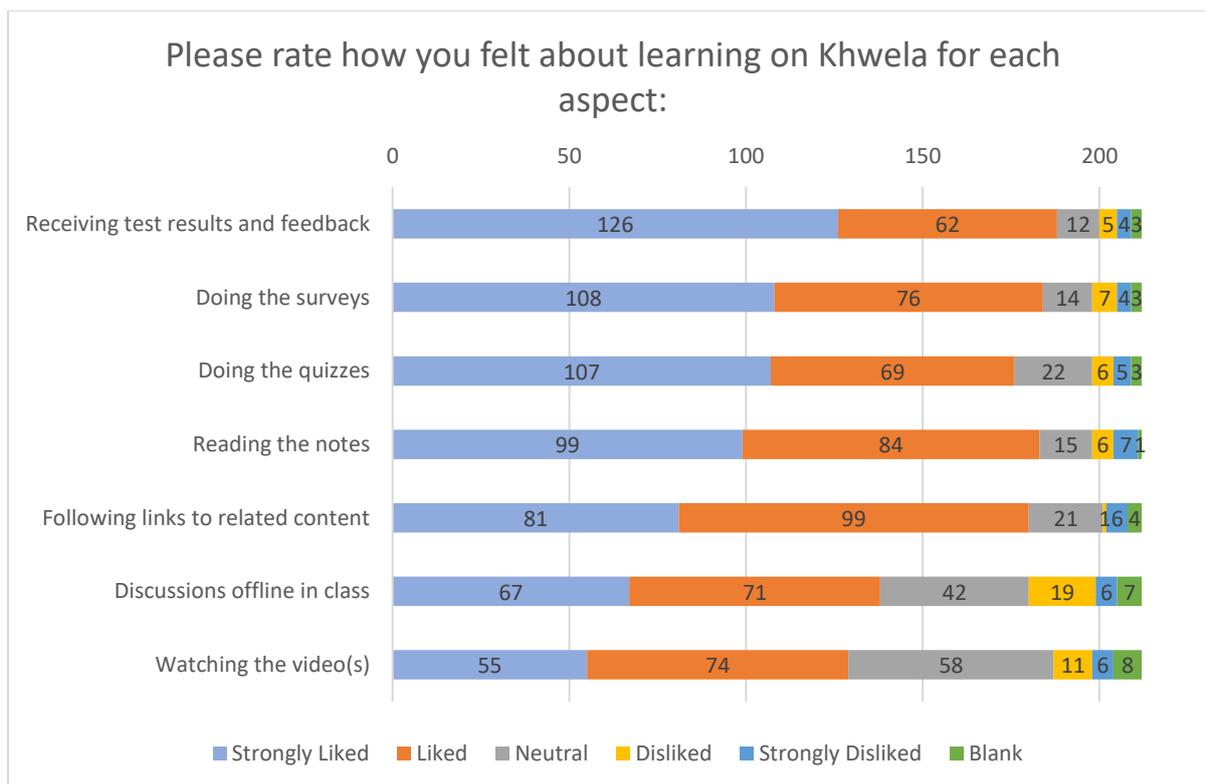


Figure 5-19 Please rate how you felt about each learning aspect on Khwela

Source: Author's own

Video-watching was ranked relatively low compared to other learning methods. Videos were ranked lowly because the video-watching experience was poor. The course was designed to have only few videos, some with isiZulu voice overs and some without. They were less than 4 minutes in length as it was expected that the research sites would have poor connectivity.²⁸⁴ One unforeseen problem was that YouTube was blocked at Mankweng due to the regulations of University of Limpopo, where the course was run. Thus, Mankweng participants could not watch the videos at all. As P088M00FNS suggested in relation to this, *'The way to view videos should have many options other than you-tube'*. In other cases, desktops at venues didn't have headsets and if participants didn't have their own headphones with them, they could not listen to the audio. This shaped the suggestion that *'videos must play without inserting headset'* (P094M31FSO). This resulted in various conflicting opinions in the suggested improvements such as *'remove or reduce videos'* (P093M30FNS) and *'making use of more videos'* (P052I31FZU). While the experience of using videos in this course was not enjoyed, 163 participants (76.9%) would will prefer more videos as was highlighted in Figure 5-20.

²⁸⁴ Videos were summaries and thus were not essential if missed out.

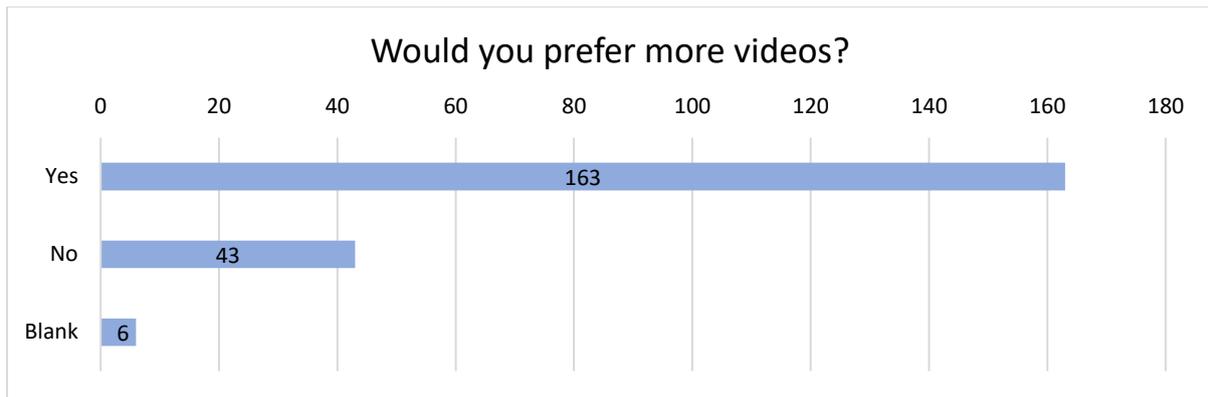


Figure 5-20 Responses to 'Would you prefer more videos?'

Source: Author's own

5.6.5 Interaction Preferences

This section focuses more specifically on interaction preferences. As the course required participants to help and support each other, one of the questions investigated if valuable connections were made. Figure 5-21 shows that 140 (66.0%) of the participants made new friends and broadened their networks, indicating the peripheral benefits of a face-to-face classroom environment.

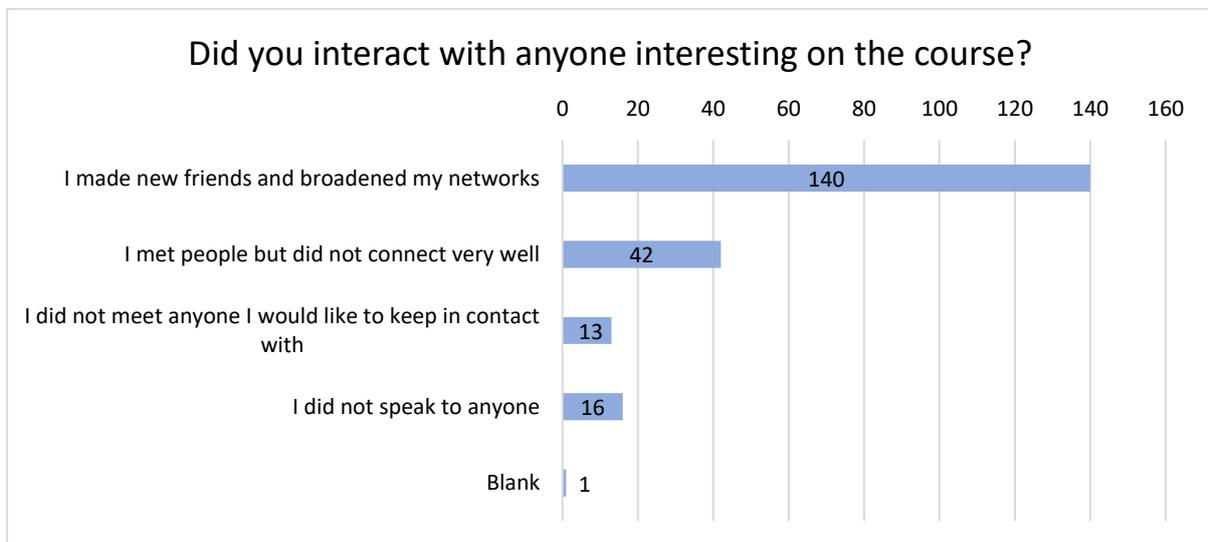


Figure 5-21 Responses to 'Did you interact with anyone interesting on the course?'

Source: Author's own

Figure 5-22 shows responses to the question of whether they would prefer more interactive activities or not. 162 participants (76.4%) stated they would prefer more interactive activities, which correlates to the suggestions for improvements in the course. 22 (10.4%) preferred fewer

interactive activities, which indicates that accommodation should be made for the more pensive or introverted learner.

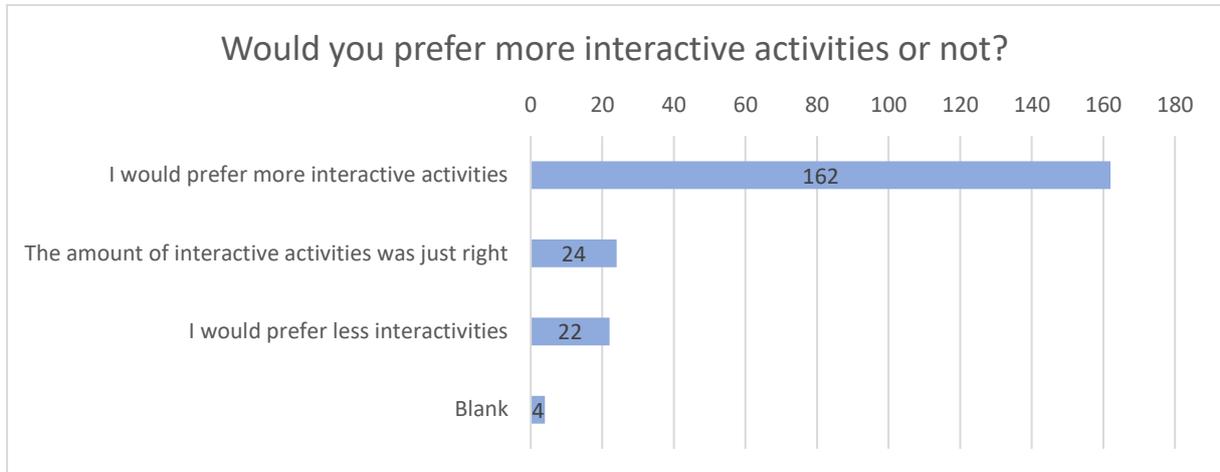


Figure 5-22 Responses to 'Would you prefer more interactive activities or not'?

Source: Author's own

Figure 5-23 and Figure 5-24 can be analysed together and show that 135 (63.67%) participants felt they learnt the most from the online content and 110 (51.89%) enjoyed the content more than group discussions. Whilst this validates the use of the online content, it should be noted that there were no alternative group-work-only activities, thus they did not have a good alternative to compare with. Group work was mainly unstructured where participants were encouraged to work together to understand the online content. Comparison between the two tables indicates that participants enjoyed group discussions, or a combination, more than they thought they learnt from it, which is a subtle distinction.²⁸⁵

²⁸⁵ The different responses between the two figures show how a purely utilitarian approach focusing on enjoyment gives a different response in comparison to what is important to learning.

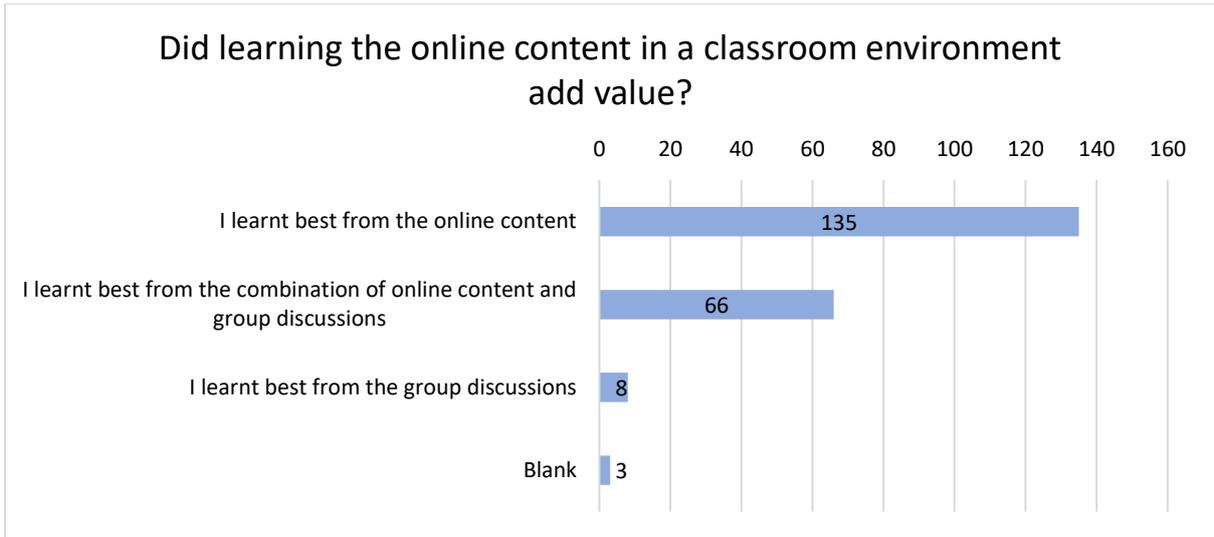


Figure 5-23 Responses to 'Did learning the online content in a classroom environment add value?'

Source: Author's own

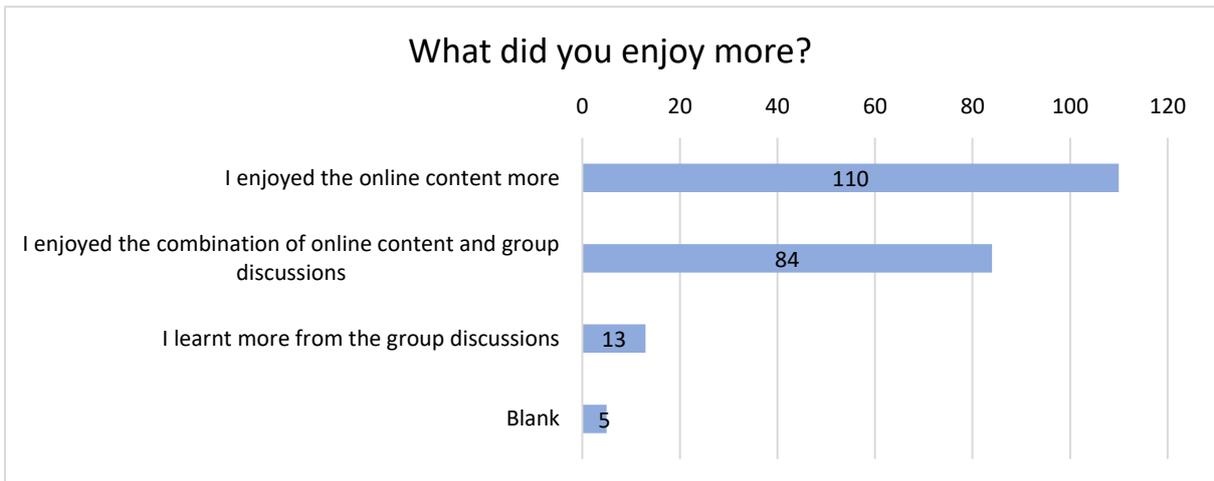


Figure 5-24 Responses to 'What did you enjoy more?'

Source: Author's own

When participants were asked if they would now do a Khwela course on their own, 175 (82.5%) responded positively, as shown in Figure 5-25, indicating that they felt confident in their online learning abilities.

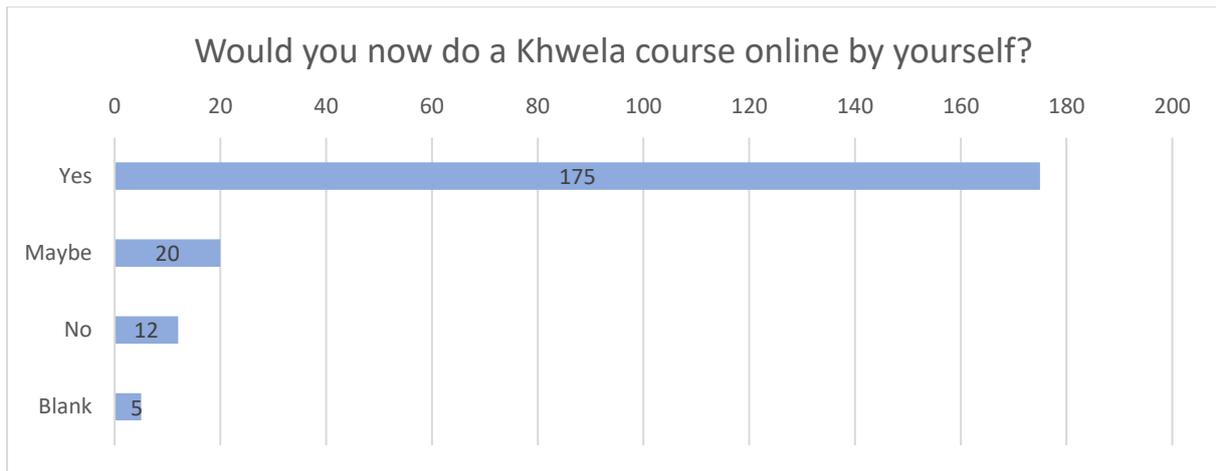


Figure 5-25 Responses to 'Would you now do a Khwela course online by yourself?'

Source: Author's own

When asked to choose between accessing the course alone, or in a community centre with others, as in Figure 5-26, 119 (56.1%) preferred with others, and 88 (41.5%) preferred at home, which shows a fairly divided opinion on this. Factors that could contribute to wanting to be in a community centre are access to resources and internet as well as peer-to-peer support.

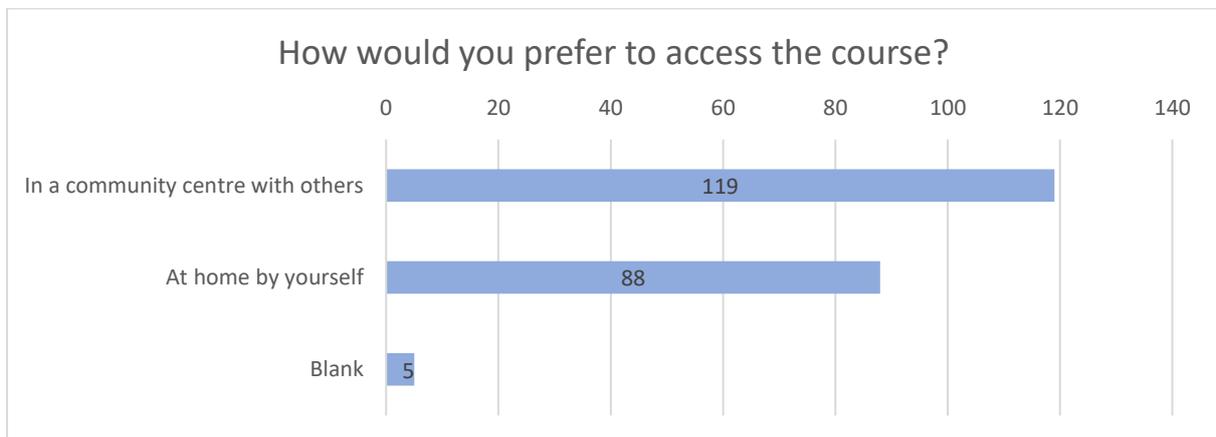


Figure 5-26 Responses to 'How would you prefer to access the course?'

Source: Author's own

A final question was added to the survey in Phases 2 and 3,²⁸⁶ regarding the need for a facilitator. Figure 5-27 shows 66 participants (55.0%) thought they could have completed the course by themselves, whereas 49 (40.8%) thought they needed a facilitator. From my observations, more than 40.8% needed a facilitator. Almost every single person in the class needed assistance at some point, even if just for validation.

²⁸⁶ There were 120 respondents in total.

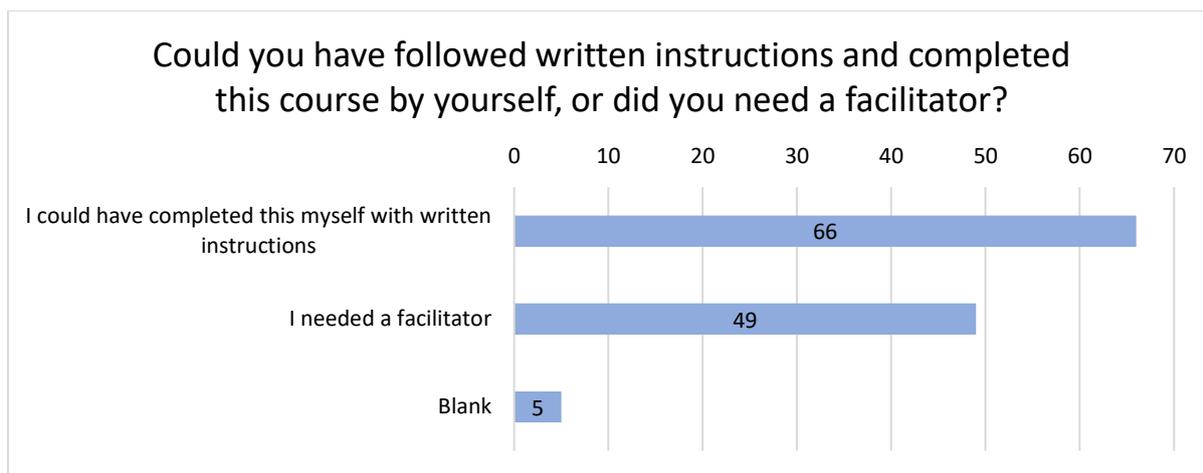


Figure 5-27 Responses to 'Could you have followed written instructions and completed this course by yourself, or did you need a facilitator?'

Source: Author's own

5.6.6 Likes and Dislikes

Participants were asked what they liked and disliked about the course. Many of the likes and dislikes, such as those relating to interactivity and pedagogy, have already been mentioned thus a thematic categorisation is not done here.²⁸⁷

One reflection from a content perspective that is worth mentioning is that participants enjoyed 'being motivated' (P246U23FZU) from the content, which was intended in the sections focused on personality, beliefs and values. Other simple aspects such as 'Creating an email' and 'Connection on WiFi' were liked (P214U24MZU). In terms of online learning as a skill, P077I30MZU stated, 'I learned of how study online'.

Conversely, when asked about dislikes, some participants mentioned open-ended and long questions, 'there was just so many stuff to write... and there were lots of questions' (P153P22MXH).²⁸⁸ Participants also mentioned dislike for 'repeating the same questions' (P144P26FBL). The repetition of questions could refer to three things. The first was the survey questions that seemingly asked the same question in different ways.²⁸⁹ The second was needing to redo answers if the internet disconnected when they submitted answers. Finally, was needing to resubmit answers to quizzes within the course until one got the answers correct, to unlock

²⁸⁷ Additionally, when asked about what they liked and disliked about the course, participants responded mostly with specific content sections, rather than design, user interface, and pedagogy, which are of interest in this thesis.

²⁸⁸ The questions referred to here were actually the survey questions which were not decoupled from the course, and thus viewed as part of the course experience. Nevertheless, the finding that participants dislike long, open-ended questions is useful.

²⁸⁹ While it appeared repetition to the participant, they were nuanced differences, e.g. 'What brings you joy?' and 'What is an ideal life?'.

the next section. While the first reason was more to do with surveys, the latter two are experiences participants could typically experience when doing an online course. The time taken to type out an answer also contributes to the frustration of having to repeat something, thus computer literacy levels impact digital pedagogy preferences.

A particular part of the course that one participant indicated she disliked was *'the section that are talking about apartheid'* (P176P26FNS). She was referring to the Educational Opinions Survey discussed in Chapter 6. Similar comments were also expressed verbally in the course, not necessarily negatively, but stating that such questions required a lot of introspection and self-reflection.²⁹⁰ In reflection, the title of the survey as 'Educational Opinions' did not prepare them for the type of questions that it posed; questions that may have negatively impacted the participants' wellbeing through unexpectedly asking them to recall disturbing incidents.

5.7 Conclusion

By outlining what Potential MOOC Participants struggle with, value and aspire to, this chapter answered **research sub-question 1** and lays the groundwork for the rest of the thesis in determining to what extent MOOCs could support marginalised groups in the ways that they value. The Wellbeing Survey showed that the core problems that participants face are financial difficulties and lack of quality education. Unemployment consistently ranked as one of the biggest challenges. When asked about what brings them joy, family relations were ranked the highest, however, when asked to list aspects of a good, ideal life, participants ranked financial security the highest, followed by basic needs and infrastructure, and education. A characteristic that frequently featured as an aspect of a good life, was the ability to serve others in the community, indicating a strong sense of community and social interdependence. Family circumstances such as loss of a parent, or being a single parent also contributed to their emotional and financial difficulties. Societal issues such as physical and sexual abuse, crime and drugs additionally impacted some participants' overall wellbeing.

Participants perceived education as being essential to improving their quality of life, to the extent that it may be overvalued by them. When asked about what they would like to learn next, teaching, information technologies, social work/psychology, nursing, business studies and engineering were most frequently mentioned as well as many vocational fields. Despite the constant emphasis on financial difficulties, the reasons for study choices were mostly because of passion for the subject, societal need, or for genuine intrigue into the field of study,

²⁹⁰ Participants had not expected this in a course about career development and were somewhat blindsided.

rather than pursuing careers for purely financial reasons. The type of skills that they sought for employment were mainly soft skills, computer skills, and subject-specific skills. Shortfalls in education included lack of funds, poor-quality education resulting in low results, content and pedagogy that does not focus on hands-on experience, under-resourced schools, and lack of mentorship. There were only a few mentions from PMPs of wanting education that encourages critical thinking or character building.

Computer skills seemed to be a means to employment rather than a goal in themselves. When ranked among aspects of a quality life, technology ranked quite low in essentiality. Furthermore, technology as a means to improving employment opportunities, rather than a goal in itself, came across strongly in the Technology Survey questions. For example, in answering open-endedly about why smartphones or computers improve one's quality of life, ease of access to information and job searching were the most mentioned answers. Correlating with this, the top answers in the predefined list were CV typing, submitting applications and searching for jobs.

Before the online course was conducted, participants were asked if they would be open to learning through online courses. The answers were mixed with 51.6% saying they would be open to it. For those that were not inclined, lack of a teacher, classroom environment and guidance were the main concerns, and for those that were inclined, ease, flexibility in time, and decreased cost were major positive factors. Those who were inclined seemed to be comfortable with self-directed and distance learning. Across the spectrum though, there was a request for more information about what online learning is and how it works, as the concept was unfamiliar to them. After the course, 79.2% participants indicated they liked or strongly liked the overall experience of the course and would recommend it to others, indicating that once familiarised with the concept, it was less daunting and confusing.

In terms of learning preferences before the course, participants stated they preferred interaction with educators and peers above reading and self-directed learning. These preferences were reiterated in the Feedback Survey after the course with many suggestions for more educator guidance, group work and classroom interaction, particularly interaction that didn't need the computer. Despite this, participants stated they learnt more from the content alone, and enjoyed the content alone over the combination of content and group work. One explanation for this is that no structured example of group work was given in the course and thus participants did not have a good comparison. More guidance and instruction were requested from participants in

the suggested improvements, indicating that they did not like self-directed learning. Participants particularly stated they enjoyed getting instant feedback and doing quizzes, a feature that online courses are particularly good at. 78.8% of participants preferred to learn in English, as opposed to their home languages. While the video-watching experience was poor, most participants still wanted more videos in the course.

One theme that seemed to cut across all the surveys was a lack of support, whether emotional support, academic support, career guidance, business mentorship or tech support. This was exacerbated by the lack of inter-generational support due to the high number of participants that did not have guardians. The feeling of helplessness is also emphasised in issues of unemployment, as unemployment not only led to financial burden but also had an impact on their confidence and self-esteem.

In addition to the contextual findings, this chapter also contributes in terms of evaluating how different survey questions bring about varied responses. The open-ended questions allowed for a breadth of themes to arise from individuals, whereas the predefined lists allowed one to analyse the depth of a theme by seeing how many participants share the same views. The combined and iterative approach (i.e. Phase 1 informing Phases 2 and 3) thus allowed for a more thorough understanding of participants' lives.

While financial instability and poor-quality education were mentioned repeatedly, the structural injustices that caused such imbalances (e.g. apartheid) were not mentioned. In Chapter 6, responses from the Educational Opinions Survey surface participants' views on the material, cultural-epistemic and political/geopolitical injustices in their education as well as the emancipatory elements of education. This shows how framing can influence answers and why it was necessary to use multiple dimensions of analysis in this research to gain a fuller picture.

6 Potential MOOC Participants: Investigating the impact of colonialism and apartheid on their education

6.1 Introduction

This chapter investigates the *sources* of injustices that cause the difficulties that participants face. This is done through responding to **research sub-question 2:**

How do historical injustices, particularly colonialism, apartheid, and their legacies, impact the education of marginalised peri-urban youth in South Africa?

Drawing on the Dimension of Human Injustice Framework formulated in Section 3.6, injustice is unpacked in terms of material injustices, cultural-epistemic injustices, and political/geopolitical injustices, noting their entanglements. This chapter does not focus on MOOCs yet, but rather on injustices that impact PMP's education. Chapters 7, 8 and 9 will then address the extent to which these injustices are being or can be addressed through MOOCs.

This chapter emphasises the voices of marginalised South African youth who are not at universities regarding their views on decolonising education. This matters because over 82% of South African high school graduates (matriculants) do not enter universities (Nkosi 2015), yet the voices that currently represent youth on this matter, most notably in the 2015 and 2016 decolonial student protests, are the voices of university students. Whilst black students at university are not necessarily elite or privileged, youth outside of universities are generally even less privileged and have relatively less access to channels of power. It is also crucial to understand their concerns to ascertain the feasibility of alternative education platforms for those not undertaking formal tertiary education. Thus, where applicable throughout the chapter, comparisons are made between the participant's responses and a longitudinal study conducted by Swartz et al. (2018) that presents 69 (predominantly black) university students' opinions on race, education and emancipation, to highlight similarities and differences.

The data for this chapter comes from the Educational Opinions Survey which received responses from 230 participants. This survey investigated participant's opinions on the injustices they may face in their education. Since the word 'decolonisation' is inaccessible to majority of the population who are not native English speakers, and who do not engage with the jargon of academic discourse, the questions were phrased simply to investigate their opinions on the topic rather than measuring their English or academic understanding of

terminologies. Only the last question explicitly introduces the term ‘decolonisation’ to see how far it has reached the masses within South Africa.

In this chapter, Section 6.2 discusses the material inequalities faced by participants, Section 6.3 unpacks experiences of racial discrimination, Section 6.4 looks at the impacts of coloniality and the marginalisation of African cultures, Section 6.5 presents opinions on the significance of the race of educators, and Section 6.6 outlines different understandings of decolonisation terminology.

6.2 Material Inequalities

While Chapter 5 highlighted many material difficulties participants face, participants made little mention of the factors that have contributed to inequality. This section reframes the difficulties they face in terms of historic and structural inequalities focusing on inequalities in educational access, economic inequalities and geographical inequalities.

6.2.1 Educational Access Inequalities

Participants were first asked a straightforward question on whether they thought the effects of apartheid and colonialism had a negative impact on their education.²⁹¹ 102 participants agreed that apartheid impacted their education negatively, 62 responded that it didn’t impact their education negatively, and 65 were unsure.²⁹² Amongst those who did not think it impacted their education negatively, the focus was on the immediate policy changes that took place, rather than the carry-over of apartheid policies and structures. For example, P242U00FZU, who did not think apartheid impacted her current education stated, *‘Because there is free education in this country and every has the excess in education whether you poor or richer’*, whilst P120P21FZU said, *‘nowdays we a better education than before’*. Such comments highlight the efforts to reform education since political independence.

The other 102 participants were more vocal in their grievances with education, some to the extent that they saw little value in education for bringing about equity. P243U00FZU stated,

²⁹¹ This section focuses on the material inequalities that participants mentioned in their responses. There were many mentions of cultural-epistemic injustices caused by Apartheid but these are discussed in the following sections and are not mentioned here for brevity.

²⁹² Due to the phrasing of the question lacking a time reference, the question was open to interpretation. Some responded historically, referring to Bantu education models during Apartheid, whilst others responded to their present-day situation. An interesting deduction from this confusion is that many participants saw a clear-cut distinctive difference between Apartheid and post-Apartheid, rather than a transition.

'Even now some of don't see any use of going to school because of inequality'. Inadequate resources and poor-quality education were criticisms shared by 52 participants.

Several participants argued that the present-day poor quality of schools is linked to their race. P116M30MNS mentioned, *'They are still black people who are attending school at classroom without windows'*. Similarly, P219U34FZU stated, *'Due to our race catogory we have no access to good education'*. These issues were overlapped with the fact that many black schools are based in under-resourced rural areas as was highlighted by P100M30MNS: *'I started my studies in a rural school and the quality was poor with no laboratories for science and technology'*. P140P24FZU explained, *'There is still a huge gap between the quality of education in rural areas, townships and urban areas (which has the highest quality)'*. These categorizations overlap with the proximity to historically-white areas, as will be discussed in detail in Section 6.2.3.

These comments not only relate to schools, but to universities as well. P089M27MSO highlighted, *'black universities were provided with poor education and less access to new developments, and the now government is still struggling to change the situation'*. Such a comment sheds light on the complexity of the decolonisation process of historically-black universities and schools. As discussed further below, students' experiences manifest very differently in historically-white spaces and historically-black spaces. The role and form of decolonisation thus changes depending on these variances.

8 participants highlighted that good-quality education was reserved for those at private schools. Several argued that *'Public education is different from private school education'* (P255) but *'black people were not aloud to be at private school'* (P077I30MZU). Although they are now allowed to attend private schools, they are limited by financial barriers. The difference in quality of education for whites and blacks was highlighted by 11 participants. P004C41FTW acknowledged that white students could access better quality education due to their privilege and intergenerational wealth: *'I did not have the privilege that white kids had, I have disadvantaged background, my parents didn't have enough money'*. Additionally, the problem of uneducated parents who can't assist their children was strongly present in the comments of 8 participants: *'our parents did not get quality education and that affect their children it is difficult to help their children to succeed'* (P257). P015C22MNS similarly elaborates, *'My parents are not educated maby if they were educated, maby i would be educated'*. This

sentiment was also expressed by a black university student interviewed by Swartz et al. (2018:43):

‘...for Indians to study law there must be somebody who has studied law at home or they have a relative who is practicing or who is at a law firm for them to secure a job. We as Black or the historically disadvantaged and still disadvantaged, we only come here with dreams. (BM_21_UKZNSTUD7_LLB_2015)’

The legacy of apartheid continues from education to employment: *'now we dont have job opportunities and we are unable to go futher with our studies because our oarents dont have money to take us to school'* (P028C23FNS). The intersection of difficulties such as unemployment, poor-quality education and poor, uneducated parents, make it hard to break out of poverty. Out of numerous problems, the lack of money is pre-eminent as it appears as the solution to all problems: *'if you have rich parets you have money to do anything and study every where'* (P250U25FZU). Education is seen as the key to employment and economic emancipation: *'most black are not working because they had no education'* (P169P30FNS).

6.2.2 Economic Inequalities

Despite the poor-quality of public education, some participants noted and appreciated that primary and secondary education was free or low cost: *'I did not pay school fees which accommodates my financial situation'* (P173P19FTO), *'it changed our lives many people are now educated because of free education'* (P193P19FXH). These participants acknowledged an improvement since the apartheid education system, despite ongoing concerns about quality of education in free or low-fee schools.

However, the problem with the neoliberalisation and commodification of education, as one participant succinctly summarised, is that *'if u want to increase ur knowledge u have to have money'* (P241U00MZU). Of the problems that participants had in studying beyond secondary education, they emphasised financial barriers: *'we still don't have money to further our education but if it was free only lazy people would sit around and do nothing'* (P129P42FSO). Financial barriers included the costs of books (P095M25MNS), transportation to school or university (P100M30MNS), and difficulties getting (P187P26FNS). These financial barriers to education reinforce inequality, as P211U22MZU frankly states: *'Africans go poor while white people get richer'*.

Family financial dynamics play an important role in these concerns. P140P24FZU mentioned having to support his/her whole family, as opposed to just her/himself (termed the ‘Black Tax’): *‘It is very expensive to study for a degree and there are other people I need to take care of in my life.’* The themes of supporting family and financial ability are strongly woven together: *‘my family has many dependents on the parents income that sometimes i struggled to get what i needed in school’*(P099M24FNS). What little wealth a guardian has, needs to be distributed amongst many dependents. P118P27FNS highlighted how one’s family dynamics were not taken into account: *‘because you were compelled to pay for your fees regardless of your family outcome’*.²⁹³ Financial precarity is not only a barrier to accessing education, but distracts students from performing well at school and impacts their ability to learn: *‘There were times when there were family problems that I have experienced and the didn’t take notice of my marks dropping down’* (P117P26FSO). Conversely, white students faced relatively less pressure because of intergenerational wealth. As a university student interviewed by Swartz et al. (2018:43) outlined,

‘Their parents are well off, or they’re, can I say ‘set’ financially? So you’ll find that most of the Black kids, just because they came here [university], they’re like, “Okay. Now I can’t mess this up.” (BM_22_UJSTUD_ElecEng_2016)’

6.2.3 Geographical Inequalities

The legacy of land dispossession, forced removals, and segregation in urban and rural areas, has had a long-lasting effect on the conditions of the lives of black South Africans (Platzky and Walker 1985). P141P42MNS shared that *‘we were removed by force from the land’*. P148P29FTO similarly stated, *‘they took our land to our lates grand mother and grandfather’*. Despite apartheid ending, many South Africans have neither had their land returned to them, nor been compensated.

P089M27MSO explains how this legacy still impacts one’s education and employment opportunities: *‘education was catergorised according to geographical location, because our education in rural areas was not up to standard and we even lacked access to study materials. i’ve lost faith in finding employment, caused seems the type of education i’ve received is not much considered in the work environment’*. Regarding access to education, difficulties such as needing to *‘walk long distance to school’* (P036C39FZU) has ramifications such as children

²⁹³ Interestingly, many participants used the phrase ‘family outcome’ to allude to the family’s financial situation.

staying at home and *'not finishing school'* (P260).²⁹⁴ Another participant shared that bad roads outside of school affects her ability to access school: *'i am from a deep rural village with no proper roads so during rainy seasons sometimes there will be no way to get to school'* (P099M24FNS). Beyond distance, *'In some rural areas there are no adequate resources like computers and internet facilities'* (P143P42MSO). Thus, the location one is in, based on the long-lasting effects of policies like the *Group Areas Act*, has major implications for the quality of education one will receive in South Africa.²⁹⁵

6.3 Unpacking Racial Discrimination

Beyond material injustices, participants also faced cultural-epistemic injustices through racial discrimination. Participants were asked to share if they had experiences of racial discrimination: 120 (52.1%) responded, sharing incidents. Similar to Section 6.2.1, participants reported different kinds of discrimination between places of learning with predominantly-black students and teachers, and those who attended multi-cultural or historically-white educational spaces.

6.3.1 Black-white Racism in Education

Participants from multicultural learning environments shared responses of racial discrimination predominantly related to racism by white people against black people.²⁹⁶ Within the classroom environment, P129P42FSO stated that *'at some schools some of the white teachers still treat black pupil bad and with hatred'*. P097M25FNS stated, *'always using the "typical" word whenever a black child misbehaves'*. P177P23FXH mentioned, *'The was this one white teachers who gave marks according to the color of our skins'*.

Participants also mentioned that they sometimes felt worthless, unheard and disrespected in multicultural learning spaces: *'They were made to feel as they were nothing in front of other learners'* (P054I19FXH). P093M30FNS stated that *'at the university I studied there are few cultures which are taken seriously and intelligent and when they speak you have to give them an ear but to others not.'* This rejection has also led to them feeling afraid to participate and feeling incapable of contributing: *'This often happened in class that the students were shy to*

²⁹⁴ Long distances to get to school was also mentioned in Section 5.3.1.

²⁹⁵ Other policies include the 1913 Native Land Act, the 1952 Pass Laws Act and the 1959 Extension of Universities Act. These were touched upon in Section 2.2.

²⁹⁶ Class, tribal and ethnic discrimination are outlined in Section 6.3.2.

contribute to discussion even though they knew the answers' (P059I25FXH). A crucial element of this is the fluency with which one speaks English, which is discussed in Section 6.4.2.

The ways that black people are made to feel inferior, are strongly linked to assumptions about their intelligence. P173P19FTO explained, *'I have been in a program where by whites where given more opportunity to say their opinion in the subject than the blacks which made us blacks feel less intelligent.'* P097M25FNS shared that *'if the learner from different race doesn't know the answer they take it that its obvious a black learner wont know the right answer so they don't give opportunity to try'*. There was also a stereotyping of which subjects black people should take: *'especially for the black child, theres a notion that has implanted that maths and science is not for the black child'* (P118P27FNS).²⁹⁷ This mentality stems from apartheid influences where *'mostly blacks were made to believe that they were not good in science so they should at least take teaching and nursing professions'* (P159P41FXH). These incidents show that despite access being given to black students, stereotypes and discrimination remain present in the learning environment, whether consciously or subconsciously.

In educational spaces beyond the classroom, some participants also raised issues of racism such as not being selected in student leadership, debate teams or sport teams (P024C24MEN, P233U31MZU). In some cases, participants described explicit racism, such as segregation of facilities like toilets (P132P36FTW). P099M24FNS shared that *'in school when we went for sport competitions black or brown learners would not share same rooms or changing facilities'*. Thus, even with attempts to overcome racial injustices in formal learning spaces, discrimination continues in other informal parts of the educational space.

Beyond educational settings, participants also reported extensive examples of racism in daily life including unequal service at shops based on their appearance (P134P26FZU), being treated as servants to whites (P094M31FSO), framed as dependent on white people's support (P140P24FZU), stereotyped as criminals (P100M30MNS), and being renamed in employment so it was easier for their white bosses to pronounce (P113M21MBL).

6.3.2 Beyond Black-white Racism: tribal, class and ethnic discrimination

Where participants attended predominantly-black schools, their reflections on racial discrimination were more nuanced. P174P21FNS stated that apartheid *'had a negative impact on how people should treat each other and how us as people must treat one another'*. Many

²⁹⁷ These stereotypes are built upon comments like Hendrik Verwoerd's quote in Section 2.2.2.

participants were taught by black teachers who would sometimes insult and demotivate the learners. For example, P041C18FZU shared a *'stupid comment from a teacher saying he wished he was white and didn't have to teach black baboons'*. P095M25MNS shared, *'most of my educators used to say we will be poor like our parents.'* P113M21MBL remarked that *'our teachers made us feel as if we wouldn't be nothing in life'*. These examples illustrate that even post-apartheid, some black teachers seem to have internalised inferiority and reflect their bitterness onto their students.

Discrimination was also experienced from peers. One recurring tension, for instance, was that of Xitsonga people. P102M25FNS from Mangweng (who is not Xitsonga) stated that *'we had different cultures and Xitsonga was the ones who are favoured'*. Whilst P192P23FTO from Ivory Park²⁹⁸ (who is Xitsonga) said, *'sometimes being tsonga around your community your forced to change /suppress part of your identity or culture because its like you dont belong in their community so you have to speak their language in order to communicate with them'*. Tensions also manifested between multiple racial groups where *'blacks ... were also oppressed by the Bowers, colored and Indians'* (P065I26MZU).

Racial discrimination beyond black-white racism was also experienced by university students. A participant interviewed by Swartz et al. (2018:41) stated,

‘We always say racism is from the White to the Black, but racism is everywhere. You find that the Xhosa man does not want to speak Xhosa because he feels that he’s much more inferior to the other races and so on. (BM_23_ULSTUD_BA_2016)’

Discrimination can also manifest along class lines, whereby elite black people will discriminate against poorer black people: *'if you go to suburbs and meet black people that act superior like you some kind of rubbish'* (P212U28MZU), or along urban-rural divisions: *'Just because i come in a rural area they said i'm uncivilized'* (P207U26FZU). Through these examples, it is illustrated that discrimination is not merely white-black but includes tribal, ethnic, class, and urban-rural discriminations.

6.3.3 Discrimination in Employment and Entrepreneurship

Discrimination in education is part of a broader pattern of discrimination, for instance, when trying to earn a livelihood, whether through employment, entrepreneurship, or agriculture.

²⁹⁸ 23.2% of the participants in Ivory Park were Tsonga.

P157P35MVE argued that finding employment was more difficult as a black person: *'white people get job quick than African man'*. Even once hired, black people have experienced being excluded from positions of power and decision-making: *'Black people keeping lower posts'* (P228U39FZU) and *'were given unskilled job'* (P221U42MZU). P026C34FSW shared that *'[i]n most cases higher positions were given to the whites because it was claimed that whites were intelligent than the Blacks.'* Participants also experienced racial discrimination in the workplace: *'Stereotypes of black people being lazy to do the work'* (P187P26FNS). P041C18FZU shared that when *'failing to do something at work ask your boss to do it for you then he tells you how much black people need help from white all the time'*.

In terms of business ownership, lack of start-up capital was a barrier. This, too, was racialised, as P038C25FNS argued, *'if you go to the bank to apply for a loan to start business is not easy to get it, but white people is easy'*. Because black people do not have accumulated wealth or property, they do not have collateral for loans. Thus, *'lot of people who have the business minded but because of race they where shut out.'* (P263). Participants thus felt that their race and historical-economic disadvantages prevent them from becoming business owners.

Discrimination was also experienced in commercial farming, an industry dominated by large-scale white-owned corporates, which is difficult for poor and black people to access. For example, P089M27MSO who studies agriculture shares, *'we grew up knowing whites as only commercial farmers, but black people whee only considered to farm fro their survival. this made black people as less intelligent and not capable of running commercial farms.'* P221U42MZU reflected that the *'[f]armstead of the black people were confisticated by white peopple'*. Here we see that historical injustices have not been corrected and white farmers not only keep the occupied land but are seen as experts in commercial farming.

These subsections show the racial discrimination against black people by white people, as well as discrimination between tribes, ethnicities and classes. Since the end of apartheid, such discrimination has been made unconstitutional, including in schools (Section 27 2017), and there have been several active policy interventions to rectify historical injustices, such as Broad-based Black Economic Empowerment in employment practices, and grants and subsidies for black entrepreneurs (DTI 2014). However, discrimination remains ever-present in participants' educational experiences, employment and broader life. The fact that

participants are not aware of their rights and opportunities shows that these policies are not reaching the people who need them.²⁹⁹

Lembede (1996:117) aptly summarises the experiences of inferiorisation that participants shared:

‘the African people have been told time and again that they are babies, that they are an inferior race, that they cannot achieve anything worthwhile by themselves or without a white man as their “trustee” or “leader.” ... Now I stand for the revolt against this psychological enslavement of my people. I strive for the eradication of this “Ja-Baas” mentality, which for centuries has been systematically and subtly implanted into the minds of the Africans.’³⁰⁰

These words highlight the cultural-epistemic injustices cemented through centuries of racial discrimination and inferiorisation, where even after political emancipation, coloniality continues.

6.4 Influence of Western Ways-of-being

This section investigates cultural-epistemic and geopolitical injustices such as the influence of Western ways-of-being and the marginalisation of African ways-of-being. Participants were asked whether they felt their education was Westernised and, if so, how. The main themes that emerged were the Westernisation of knowledge (Sections 6.4.1), language (Section 6.4.2), and culture (6.4.3), as well as their entanglements, which are addressed in this section.

6.4.1 Prioritisation of Western Knowledges over African Knowledges

When asked about Westernisation, participants mentioned numerous disciplines and canons of knowledge that they felt were Westernised: *‘Every jurist, philosopher is from the western part of the world. Our law and everything is the reflection of the western of our world’* (P087M00MNS). Others mentioned *‘financial, judicial and medicinal’* fields (P082M26MNS), *‘sociology of medicine, development and social policy’* (P093M30FNS), and *‘science’* (P121P24FNS). In history, P192P23FTO was *‘taught about ... the jews, nazi party’*. Notably, P108M33FNS mentioned that *‘in psychology, western medicine a prescribed only,*

²⁹⁹ Swartz et al. (2018:43) additionally highlight that, in some cases, inequality and oppression has become so entrenched in the minds of the marginalised and has shaped their worldview, that when change happens, it is sometimes difficult for people to acknowledge and believe.

³⁰⁰ ‘Ya-Baas’ is Afrikaans for Yes-Boss.

using traditional herbs is like not know anything.’ 6 others took a firmer stance that *‘everything that I was taught was too western’* (P088M00FNS).³⁰¹

Various participants felt that there was a lack of knowledge and history of other African countries in their education. For (P166P27FTO), *‘west african is left out’* and for (P249U23FZU), *‘some of the knowledge that come from south africa are left out’*. P140P24FZU reflected on the perspectives from which history is taught, *‘We learn about Jaan Van Riebek more than we learn about our black Hero such as Walter Sisulu’*.³⁰² Participants also commented on the content of their education, specifically responding to a question on illustrations: *‘i have never seen any Black person in any illustrations or drawings at school’* (P082M26MNS). These participants would have likely been referring to older curriculums, as newer ones are changing as stated by P109M20MNS: *‘We are being taught how to be proud of our country and how we should utilize our resources to improve its economy’*. The latter part of his statement shows the neoliberal undertones in newer education models.

Participants raised issues not only of content, but also of pedagogy, referring to issues with Western *‘method of teaching’* (P206U32FZU) and *‘educational processes’* (P077I30MZU). P075I28FZU mentioned a loss of local ways of learning *‘because we do not use our general way to learn or to count in meths’*. Another theme brought up was that Western education as *‘less of morals’* (P245U19MZU), alluding to lack of moral teaching in education.

One unique theme that emerged on question of Westernisation is that of technology: *‘everything is all about the internet and doing things online’* (P041C18FZU). Some participants seem to have internalised the idea that technology and innovation are Western and does not or cannot originate from Africa: *‘Most if not all technology come from the West’* (P060I37FZU). Participants differed on whether technologization from the West was a good or bad thing. P084M22FVE viewed it as a good thing: *‘we are now in a new centuary of technology so we have to learn about everything and in our African languages some things not there’*. P032C20FEN, however, viewed it in a negative light as a creeping of Western values: *‘using phones and internet to do indecent things like watching pornography’*. These negative impacts of Western material were highlighted by Fanon (1961:195) who argued that the import

³⁰¹ Without using any words of decolonisation, they outlined similar problems that decolonial scholars raise.

³⁰² Jan van Riebeeck, a Dutch settler, was previously taught to be the founder of the country of their forefathers (Section 2.2.1).

of 'sexy photographs, pornographic literature, films banned to those under sixteen' specifically impacts youth in developing countries who are at 'the violent collision of two worlds'.

6.4.2 Complexity of Language Choices

Participants' comments on language frequently problematised how their lack of fluency in English was used to make judgements on their intelligence: *'Most people are being judged for their intelligence based on their fluently English speaking, of which that does not determines your intelligence'* (P060I37FZU). Not speaking English was a sign of being 'uncivilised'. In survey responses to the question of Westernisation, 26 participants explicitly mentioned use of the English language as a problem of Western influence in the education system. They raised issues such as not being taught in their mother tongues (P096M26FNS), being required to learn in foreign languages (P104M24MSO), and not being allowed to talk in African languages in school (P117P26FSO). P056I37FZU made a striking point that *'white school didn't learn Zulu but we black people learn English'*. The contrast is stark: that in an African country, the African is required to learn the language of the European, yet not vice versa.

While some participants showed general dislike to being taught in foreign languages, others specifically disliked Afrikaans because *'some schools force children to study only Afrikaans and not other languages'* (P032C20FEN).³⁰³ Language use also has a drastic impact on identity: *'now if I am using borer launged [boer language i.e. Afrikaans] I am not felt as I am an black person'* (P055I21FZU). This specific dislike for Afrikaans is likely due to the violent and recent past with Afrikaners in apartheid, versus the more distant and elusive history of colonialism (Section 2.2).

Some participants, however, did not experience issues of being forced to use foreign languages in school: *'interms of the education being localised is that people being taught by their mother taunges nower days'* (P096M26FNS). P095M25MNS stated that *'teachers teach in a way that accommodate local people, e.g. you will find a teacher teach English using Sepedi'*. These comments are likely from those who attend schools that cater to specific language demands, as it is not the case in multi-tribal and multi-cultural schools with students of diverse backgrounds and languages.

Despite participants' grievances about the loss of their mother-tongue languages in education, when asked explicitly about their language of instruction preferences, 76.2% of participants

³⁰³ This can also be linked to the 1976 Soweto Uprising where students were killed while protesting against policies to be taught in Afrikaans (Section 2.2.2).

preferred to be taught in English as indicated in Table 6-1.³⁰⁴ The preference for English was evident irrespective of the language of instruction they had previously learnt in.

Table 6-1 Language of instruction taught versus language of instruction preferred

		Language of Instruction Taught		Total
		English	African	
Preferred language of instruction	English	129 (75.9%)	44 (77.2%)	173 (76.2%)
	African	30 (17.6%)	10 (17.5%)	40 (17.6%)
	No Response	11 (6.5)	3 (5.3%)	14 (6.2%)
	Total	170 (100%)	57 (100%)	227 (100%)

Source: Author's own

This result is not surprising.³⁰⁵ English is a widely accepted language of trade and communication in South Africa and fluency improves job security and access to further education (Read 2015). Learning to speak English is highly desirable for national and international communication.³⁰⁶

Given the concerns and preferences of participants outlined regarding language, constitutional amendments have been made where students have the right to receive basic education in the language of their choice (Alexander 1989; Stein 2017).³⁰⁷ Additionally, the Department of Basic Education released the *Incremental Introduction of African Languages* policy which aims for all South African learners to learn at least one of the country's indigenous languages in school (Section 27 2017:211).³⁰⁸ Issues of language choices are complex, where realities of global languages exist and assist effective communication across tribes and nations. At the same time, the loss of local and indigenous languages is a serious concern. As Fanon (1967:38) highlights, 'To speak a language is to take on a world, a culture', thus language and culture are inextricably linked.

³⁰⁴ This question was asked in the Education and Employment Survey which had 227 responses.

³⁰⁵ In Section 2.2, it was highlighted that certain laws prevented Africans from learning to speak English which reduced their ability to find jobs in English-dominated workplaces. Thus, English is now seen as liberating in terms of improving access to business and employment.

³⁰⁶ This differs from other countries that may have a strong national language like Arabic or Mandarin and mainly require English for international communication.

³⁰⁷ Students may choose to learn in one of the 11 national languages as long as it is practical to do so (Stein 2017:209). Practical is defined as more than 40 students in the same grade at a school requesting a particular language of learning and teaching.

³⁰⁸ In 2018, the University of Witwatersrand also announced that it would be a requirement of new first year Bachelor of Arts students to take an African Language, namely isiZulu, Sesotho or South African Sign Language (Wits Vuvuzela 2018).

6.4.3 Accommodation of Culture in Education

A key theme that emerged from the question on Westernisation was the lack of accommodation of culture and faith in participants' education. Participants shared that their culture was portrayed as uncivilised in their education: *'some people think other people do not have cultures so they do not respect other people culture'* (P111M26FNS). Similarly, P100M30MNS stated, *'The western culture was promoted and termed the African Culture as unGodly'*.

Furthermore, participants felt that they were not allowed to practice their culture in school: *'Some schools does not allow students to practice their culture e.g. a black child puts goat skin as a bundle [bangle] in their hand and is told it is not allowed'* (P261). Similarly, P096M26FNS shared, *'we were not allowed to practise our cultural aspects,as wearing the beats which your, ancestral believes forced you to do so'*. P096M26FNS shared that *'we were told not to wear head[wraps]s in class even if it was too cold also there was this incident where by this other guy was being told to cutt off his dreadlocks and it was his culture that required him to have them on.'* P143P42MSO mentioned how her religion was suppressed, *'I was forced to follow other religion instead of mine'*. Such incidents are more prevalent in historically-white or multicultural schools and work places, than in predominantly black spaces. What is brought out here is how Western culture is deemed normal, neutral or desirable and how other cultures and religions are treated as atypical.

The problem here is not legal: constitutionally, beads, beards, dreadlocks and head coverings are permitted at schools, in line with the right to 'freedom of religion, belief and opinion' (Section 27 2017:196–97).³⁰⁹ The problem lies in knowing one's rights and being able to enforce the law. While the Constitution embraces culture as an expression of identity, it does not, however, address how Western cultures are epistemically embedded in education.³¹⁰ Such a stance compartmentalizes some cultures to the home life and personal identity yet embraces Western cultures in the educational process.

For those who felt that school did not accommodate for their culture, they reflected on how culture is something that is taught and practiced at home: *'my culture I did lean it at home not*

³⁰⁹ Regarding cultural identity, the constitutional court on cultural identity states: 'Cultural identity is one of the most important parts of a person's identity precisely because it flows from belonging to a community, and not from personal choice or achievement. And belonging involves more than simple association; it includes participation and expression of the community's practices and traditions.' - MEC for Education: KwaZuluNatal and Others v Pillay (Section 27 2017:186).

³¹⁰ For example, if religion and culture are discussed in educational settings, it refers to the subject of 'religious education' rather than their embeddedness across subjects. Thus, the dominance of western cultures in educational systems, to the neglect of epistemologies from other cultures and religions, has been overlooked.

in school' (P075I28FZU). P240U20MZU felt his cultural roots were being lost, stating, *'I am an African but I got no roots'*. P122P21FSW similarly remarked, *'We do not learn more about where we come from or who we are'*. P134P26FZU emphasised that her education *'is not useful to home life'*. P200P28FZU succinctly summarised, *'because sometimes the book tell you different thing and your grandparent tell you different'*. Participants thus identified a difference between textbook knowledge and knowledge passed down orally from the elders which is sidelined. The predicament here is that learners are often examined in relation to their book knowledge, even though their cultural knowledge might be different. Dei and Simmons (2010) problematise such education systems that are not relevant and connected to the daily lives of students arguing that education that is disjoint from home life is oppressive.

Other participants were divided on the role of culture in education. P159P41FXH stated that *'education should not interfere with culture'*. Other participants gave grammatically ambiguous comments regarding culture being taught in education, but their statements raise questions on the role of culture in education. P125P27MXH stated that *'culture are not the part of education'*, P007C28FTW stated *'learners are not supposed to express themselves in their own culture'* and P105M31FNS stated that *'The education system is not interested in either one's culture or faith'*. It is unclear whether the participants are affirming a stance that culture should be kept separate from education, simply making an observation, or highlighting a problem. If the latter, the question that arises is whether it should be able to accommodate for *all* cultures and religions? At what point is it too much? What is too little accommodation of difference? P148P29FTO shares her opinion on this: *'because at school we are many that's why we cannot accommodate each an everyone believe'*.

Participants also gave examples of assimilation with Western cultural practices: P242U00FZU shared that *'Many black people I trying so hard to forget about their culture but copy new things from the western country'*. P159P41FXH similarly reflected on the impact on one's identity, *'people are trying very hard to change their identity in order to fit in the society they feel like keeping their cultures is outdated'*. An example was given by P177P23FXH, *'even now we as black do white weddings'* and P094M31FSO emphasised that *'the way we dress'* has become Westernised. Whilst these participants saw this as a willing act to distance oneself from a black culture, P240U20MZU felt forced to assimilate: *'we are not given the chance as black to show ourself'*.

In giving examples of indigenous or local education, participants' responses exemplified the entanglement between history, culture, knowledge and lived experience. Local knowledge was enacted and part of daily life, not something learnt in books. Some examples mentioned were 'Indlamu,'³¹¹ (P242U00FZU), 'Tsotsitaal'³¹² (P137P39FNS), and 'Gqom'³¹³(P259). These three examples show how local can be differently interpreted: the first as something pre-colonial and traditional, the second as something formed in the struggle movements, and the third as a modern hybridisation.

These dynamics raise difficult questions about regionalisation of culture in terms of what is considered African and what is considered Western. P242U00FZU commented on the Gqom music of Babes Wadumo as being an infiltration of Western culture: *'Many black people I trying so hard to forget about their culture but copy new things from western country like Babes wodumo and many more'*. Whilst P242U00FZU thinks of Gqom as Westernisation of African culture, others think of it as modern local South African music culture. These examples show the difficulty in deeming something as local or not. As argued by Bhabha (1994) in his work on cultural hybridity and Jansen (2017) through the notion of entanglement, culture is complex and evolving, rather than a monolithic and static practice.

Thiong'o (1986:3) aptly summarises the opinions and experiences expressed by the participants regarding the Westernization of education:

'The biggest weapon wielded ... by imperialism against that collective defiance is the cultural bomb. The effect of a cultural bomb is to annihilate a people's belief in their names, in their languages, in their environment, in their heritage of struggle, in their unity, in their capacities and ultimately in themselves. It makes them see their past as one wasteland of non-achievement and it makes them want to distance themselves from that wasteland.'

6.5 Opinions on the Race of Educators

The question on whether the race of an educator mattered was the most answered in the whole survey, with strong, clear opinions. 151 participants did not think race mattered, 74 participants thought it did matter and 3 participants explicitly highlighted that they had not had a white

³¹¹ Indlamu is a traditional dance.

³¹² Tsotsitaal is a street-based, pidgin, language of rebellion, previously used in prisons in the Apartheid era.

³¹³ Gqom is a township-originating electronic, dance music.

educator.³¹⁴ Noting my positionality for this question is important. As a visibly Muslim Indian South African woman, facilitating a class on difficult racial topics, my presence may have influenced participants' answers.³¹⁵

Participants had wide-ranging opinions on the race of the educator, from those who wanted to move towards a post-racial South Africa, to those who judged educators on the quality of their teaching rather than race, to those who associated the educators race with cultural relevance and a comfortable learning environment.

Table 6-2 and Table 6-3 outline participants' different rationales, including selected examples to illustrate their views. From these views, it can be ascertained that the role of the race of educator is complex and entangled with many underlying assumptions. A unique and insightful comment was made by P169P30FNS who stated, *'it doesnt matter because at the end of the day he or she is a person and is up to me to make use of the information i got.'* She sees herself playing an active and critical role in her educational process.

An interesting theme that emerged in the 'Anyone can teach as long as' category, was the importance of pedagogy. P122P21FSW stated *'It does not matter who teachers you , what matter is understanding what they are teaching you'* and P255 stated *'I believe that it not about what race are you or where you from as long as one can do what is required to do in terms of making the learner understanding what is being [taught] by the teacher'*. A part of this pedagogy was the good-heartedness and fair treatment of the teacher: *'Because my educator was good person she was allowing all of us to put opinions or ideas while learning..she was not underestimating anyone'* (P245U19MZU), as well as the teacher's interest in understanding the learners and their backgrounds: *'because they were teacher who want to know about our family and where we coming from'* (P180P27FTO). These participants focused on the condition of having an empathetic, caring teacher who is able to teach well, rather than the race of the educator. This is consistent with Jansen's (2017) point that it is teachers that make the curriculum come alive, and whether the curriculum is decolonised or not, they are the ones responsible for the educational experience a student receives, from creating an inclusive space, to steering critical inquiry into the subject in question.

³¹⁴ This was likely the case for many more participants.

³¹⁵ In one of the sessions a teaching assistant explicitly used me as an example of a teacher of a different race. Thus, for some of the participants, they could have understood the question as 'Does the race of *this* educator matter to you?' as opposed to the question which was 'Does the race of *an* educator matter to you? Even if this was not the case, the context could have sub-consciously influenced them.

Table 6-2 Categories of participants to whom the race of the educator did not matter

Category	Description	Selected examples
<p>'I don't want to dwell on the past'</p> <p>Approx. 21 participants</p>	<p>These participants took a post-race stance given the end of Apartheid. They believed South African all now have equal rights and equal opportunities and should not dwell on the past.</p>	<ul style="list-style-type: none"> ➤ <i>'Colour of skin does not matter'</i> (P176P26FNS) ➤ <i>'putting you past in your present wont get us anywhere, let us move on'</i> (P225U26FZU) ➤ <i>'We are no longer living in an apartheid era.I take it that the Teacher knows that we are in class to learn and not call each other racists.'</i> (P102M25FNS) ➤ <i>'because I am not racist'</i> (P142P31FZU) ➤ <i>'Because despite the race we all have access to equal opportunities'</i> (P086M26FNS) ➤ <i>'when the educator is teaching he/she doesn't teach with race and it doesn't matter because the race thing doesn't matter at all.'</i> (P054I19FXH)
<p>'we are all the same'</p> <p>Approx. 28 participants</p>	<p>These participants took a human-centred stance, focusing on our common traits as humans rather than our differences. Some opinions had an element of patriotism.</p>	<ul style="list-style-type: none"> ➤ <i>'we all human beings we deserve respect regardless of which race you belong to'</i> (P174P21FNS) ➤ <i>'The important thing is not to concentrated on the skin colour, we have the same blood'</i> (P014C33FND) ➤ <i>'we are all South African citizens'</i> (P030C19FZU) ➤ <i>'because in this country we family'</i> (P160P25FSO)
<p>'all i need is education it does not matter who it comes from'</p> <p>Approx. 33 participants</p>	<p>These participants focused on getting education of any sort, irrespective of the race of their teacher. They viewed education as one objective experience, that does not deviate based on the teacher, or the teachers race, and is not influenced by perspective, context, or culture. Books are viewed as a neutral source of knowledge.</p>	<ul style="list-style-type: none"> ➤ <i>'The race of educater is not the matter to me,what I need is to learn and get education'</i> (P132P36FTW) ➤ <i>'at the end of the day they will be teaching thye same things'</i> (P082M26MNS) ➤ <i>'it shouldt matter since we all the have the same vision of learning'</i> (P113M21MBL) ➤ <i>'we all learn the same thing whether black or white'</i> (P103M24MNS) ➤ <i>'she or he must teach me according to book not his or her race'</i> (P200P28FZU)

<p><i>'Anyone can teach as long as...'</i></p> <p>Approx. 25 participants</p>	<p>These participants were more conditional, but the conditions were not dependent on race. The focus was on teachers' content knowledge and quality of teaching. i.e. content and pedagogy. The participants put faith in qualifications and hiring processes as indicators of good teachers. Some had faith in the good intentions of their teachers.</p>	<ul style="list-style-type: none"> ➤ <i>'As long as the educator loves all the learner and treats them equally'</i> (P175P21FZU) ➤ <i>'As long as they havr the right knowledge and tools'</i> (P117P26FSO) ➤ <i>'I believe that it not about what race are you or where you from as long as one can do what is required to do in terms of making the learner understanding what is being [taught] by the teacher'</i> (P255) ➤ <i>'As long as the educator qualified'</i> (P205U32FZU) ➤ <i>'Because the person was hired to teach us what we want to know, not us to undermine them'</i> (P144P26FBL) ➤ <i>'im here to learn not to focus on their status and because they too love teaching students'</i> (P115M23MTW)
<p><i>'becouse we use one language'</i></p> <p>Approx. 12 participants</p>	<p>These participants linked the race of the educator to language of instruction and whether they could understand what the teacher is teaching, language and accent wise. These participants saw benefit in having an English-speaking educator.</p>	<ul style="list-style-type: none"> ➤ <i>'because even when they teach I am able to hear what they are teaching me especially in english'</i> (P193P19FXH) ➤ <i>'need to learn more about another langages'</i> (P161P21FNS) ➤ <i>'becouse we use one language'</i> (P254) ➤ <i>'we need to learn the other langue'</i> (P148P29FTO)

Source: Author's own

Table 6-3 Categories of participants to whom the race of the educator did matter

Category	Description	Selected examples
<p><i>'i believe we have to learn and respect one another's race'</i></p> <p>Approx. 14 participants</p>	<p>These participants thought that the race of the educator did matter and that different races should be embraced. They saw difference as an exciting opportunity to learn new cultures, particularly as we enter an age of globalisation.</p>	<ul style="list-style-type: none"> ➤ <i>'it matters, because i believe we have to learn and respect one another's race. In order to respect it we have to learn it first'</i> (P095M25MNS) ➤ <i>'it matters because I should know more about my educator's race'</i> (P179P22FTO) ➤ <i>'we are now in a new century of technology so we have to be taught by everyone'</i> (P084M22FVE) ➤ <i>'i had different race of teachers it was fun'</i> (P146P24FNS)
<p><i>'so we can know more about who we are'</i></p> <p>Approx. 20 participants</p>	<p>These participants thought that the race of the educator mattered and that having an educator of the same race brings about more relevance. They thought it was important to know one's history and culture. One particular participant wanted to know what can be improved, indicating that culture is not static.</p>	<ul style="list-style-type: none"> ➤ <i>'I have to know who am I'</i> (P263) ➤ <i>'I have to know my culture'</i> (P143P42MSO) ➤ <i>'so we can know more about who we are and what can be improved'</i> (P177P23FXH) ➤ <i>'it very important to honor your culture and value what you 've told'</i> (P242U00FZU) ➤ <i>'because i am a black people'</i> (P050I20FZU)
<p><i>'I feel more comfortable'</i></p> <p>Approx. 5 participants</p>	<p>These participants felt discomfort or experienced condescension from white teachers resulting in them preferring to have educators of the same race, who they feel would care for and understand them better.</p>	<ul style="list-style-type: none"> ➤ <i>'I feel more comfortable when am taught with the same skin as mine'</i> (P153P22MXH) ➤ <i>'because they have a high education that why they look other down'</i> (P264) ➤ <i>'white they think are clever because they don't learn zulu'</i> (P056I37FZU) ➤ <i>'they don't care about my life'</i> (P040C20FZU) ➤ <i>'teachers leaving us confused'</i> (P009C22FTO)

Source: Author's own

By contrast to participants' varied views, university students interviewed by Swartz et al. (2018:47) felt more strongly about race:

'Black students believe that Black lecturers bring different perspectives to their learning as they are more accessible to them, they make them feel more comfortable, and they can interact with them freely without any social distance. Black students did not express having similar experiences with White lecturers who are viewed as distant and less accessible to them.'³¹⁶

The predominantly non-university participants' various narratives of having positive interactions with educators of other races seem to differ significantly from university students' experiences. This demonstrates the importance of acknowledging youth voices in South Africa beyond university students.

6.6 Perspectives of Decolonisation

The last questions in the survey were 'what does a decolonised education mean to you?' and 'do you think education needs to be decolonised?' It is crucial to explain the process of asking these questions because this impacted how participants answered. The first question was asked to ascertain whether decolonial discourse had spread to these local communities, given that South African students' struggles for decolonisation have made international headlines (Baloyi and Isaacs 2015; BBC News 2016; Kamanzi 2016). Before asking the participants the second question, the survey provided a hyperlink to an article discussing what decolonisation of education could mean.³¹⁷ The purpose was to inform participants about what decolonisation could mean before asking whether they thought it was necessary. However, from classroom observations, many students did not click on the hyperlink and it is unclear how many participants read the article before answering the last question. Participants were thus on different footings in answering the second question. Due to this, a bigger focus was given to their former qualitative answers, rather than the yes or no answers.

Another problem that arose was categorising the answers of the former question, as decolonisation has a multiplicity of meanings and is constantly evolving. As a result, it is difficult to objectively determine whether a participant understood generally accepted existing

³¹⁶ Another difference was that participants and university students faced different language barriers related to the educators' race. While participants were concerned with the ability to understand white English-speaking educators, university students struggled with 'the accents of Black or "foreign" trained lecturers whose first language is not English' (Swartz et al. 2018:47).

³¹⁷ The article is: <http://www.news24.com/SouthAfrica/News/what-is-decolonised-education-20160925>

definitions. Due to this, various in-between categories, were created to show varied levels of understanding. Table 6-4 gives a description and example of the categories that were created to group responses.

Table 6-4 Levels of understanding of decolonial discourses in education

Category	Description	Example
Understands	Participants understand generally accepted definitions of decolonisation.	See Section 6.6.2
Somewhat understands	Participants who showed a vague understanding.	'it means am free to choose any school or institution of learnibng as i please and see fit' (P087M00MNS)
Opposite understanding	Participants seemed to understand the underlying debates but misunderstood the terminology.	'It means it's the education system that favors white people' (P004C41FTW)
No comment	This was a blank response	
Misunderstands	This is the most subjective category, where it appears to the author that the participant has misunderstood the concept.	'Mean to do jorb to improve live' (P232U39MZU)
I don't know	Participants were told in the survey to write 'I don't know' if they did not know what decolonisation meant.	'I don't know' (P235U25FZU)
Did not understand answer	The answers seemed unrelated to the question.	'mean lot of thing in my life' (P062I20FZU)

Source: Author's own

Figure 6-1 shows the frequency of responses in each category, which are elaborated upon in Section 6.6.1 and Section 6.6.2.

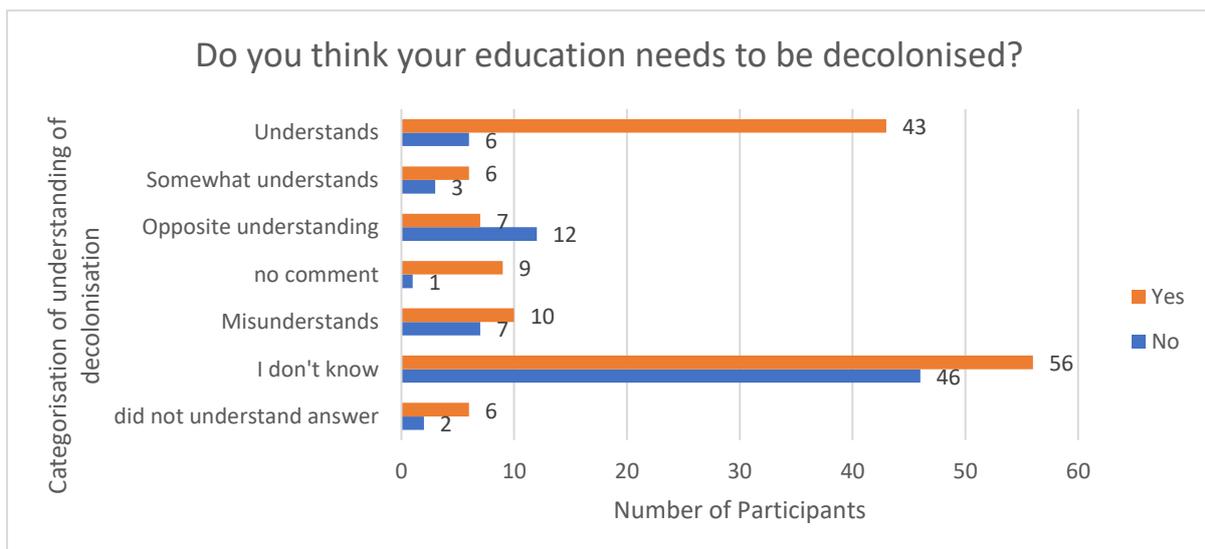


Figure 6-1 Responses to 'Do you think your education needs to be decolonised?'

Source: Author's own

6.6.1 Partial to no Understanding of Decolonial Discourses on Education

The largest category was the 102 participants who wrote ‘I don’t know’, indicating that the university-based decolonial movement has not reached them. The category of ‘Misunderstands’ (17 responses) is most subjective as I decided from the participants’ answer that they did not understand the concept. ‘Opposite understanding’ (19 responses) was a surprising category, in which it seemed like they understood the underlying debates but misunderstood the terminology. While there is no clear definition of what decolonisation is, there would be consensus that the statement in Table 6-4 is what decolonisation aims to eradicate, rather than strive for. My interpretation here is that participants were responding to their views on what colonisation means, and not decolonisation. What is evident from these answers is that these participants have a thorough understanding of the underlying problems in our education system. Lastly, the ‘Somewhat understands’ category (9 responses) was for responses that were on the right trajectory but were not quite accurate.

6.6.2 Understanding of Decolonial Discourses in Education

49 participants gave answers that showed their understanding of the concept. From these, 43 (87.76%) stated that decolonisation of education is needed, showing that if generally accepted definitions of decolonisation are taken, it is something of concern to them (See Figure 6-1). The Dimensions of Human Injustice Framework was used to unpack the various responses participants gave.

6.6.2.1 Addressing Material Injustices

In line with Section 6.2 on material injustices and Section 6.3 on racial discrimination, these participants focused decolonisation as addressing the inequalities in access to free and quality education. Some participants focused on educational inequalities specifically based on race: ‘Equal educational opportunities irrespective of color and gender’ (P113M21MBL), ‘free quality education to all race’ (P105M31FNS), ‘All race getting the same education and equal treatment academically’ (P088M00FNS) and ‘It is a democratic education that is free and fair to all races’ (P140P24FZU) illustrates this. P099M24FNS touched upon the geographical inequalities mentioned in Section 6.2.3, emphasising being able to study anywhere: ‘it means that all people regardless of race are entitled to learn whatever and where ever they wish to’. In line with the discussion on discrimination in employment in Section 6.3.3, P118P27FNS highlighted that decolonisation is when ‘everyone is free to learn or venture into a sphere of career they wish’. P097M25FNS drew attention to historical injustices, stating decolonisation

meant *'reversing what was done during colonisation by doing things differently from the past. like giving access to things learners were denied access to'*. Economic inequalities discussed in Section 6.2.2 were emphasised by P173P19FTO: *'When people are marching against fees must fall at the higher education.'* The mention of the #FeesMustFall protests by P173P19FTO indicated that she was aware of the student decolonial movements.

6.6.2.2 Addressing Cultural-epistemic Injustices

These participants described decolonisation as addressing the cultural-epistemic injustices in education. Touching on the language of instruction question, P060I37FZU saw a decolonised education as being *'able to learn in your own indigenous language'*. This, however, needs to be juxtaposed with Section 6.4.2 which indicated that many participants wanted to learn in English. P100M30MNS further emphasised decolonisation of education as a call for the generation of knowledge in local languages: *'It means that the country could now translate the subjects in the local languages of study and more graduates would tghen produces locally'*. Such an envisioning echoes the sentiments of Thiong'o (1986), who calls for a decolonisation of the mind and the challenging of hegemonic discourses through the production of content in local languages.

The inclusion of African histories is essential for decolonisation, however, how this should be done remains debatable (Section 3.5.3). Various participants drew on Africanisation as their interpretation of decolonising education: *'its means education about our cultures and background belives'* (P168P23FEN). P034C32FZU simply said, *'black education'*. P112M00FSO took an extreme stance, suggesting *'the old people or sylibas must be throw out first'*. The word *'throw out'* alludes to a complete rejection of anything Western. Juxtaposing this, P084M22FVE said *'it means education should be taught in all cultures'* implying a multicultural – including Western – approach. P089M27MSO argues for an Afrocentric approach to education: *'learning whats necesarry about your history and future, than learning something which does not affecte you in any other way.'* This remark alludes to the need for education to be relevant and contextual to the daily lives of the students. Drawing on Jansen's (2017:158) categorisations of decolonisation of education, outlined in Section 2.2.5, questions arise as to whether a decolonised education mean *only* learning about one's own culture, situating one's culture at the centre of ones learning whilst still drawing on other cultures, or learning about all cultures and their entanglements.

P086M26FNS further argues that decolonisation of education *'means that a nation must become independent with regards to the acquisition of knowledge skills, values, beliefs and habits.'* This is a very powerful epistemological definition yet opens up many more questions. What does it mean to be independent? With our hybridised identities, is it possible to draw a clear line between what is other and what is self (Bhabha 1994)? If taking Jansen's (2017:158) stance that knowledge creation is a highly entangled process, is it possible to disentangle knowledge, skills, values, beliefs and habits that have been intertwined over centuries with other civilisations to the extent that one can say it is independent of other influences? Would such a process in the long term be doing a justice or an injustice to knowledge as a whole?

6.6.2.3 Addressing Political and Geopolitical Injustices

These participants understood decolonisation of education as addressing political and geopolitical injustices. These comments overlap with the previous two categories but place emphasis on political freedom. Drawing on an event-based definition of decolonisation, P264 described decolonisation as: *'[t]o allow a colony to become independent'*. P183P24FTO similarly stated, *'to releas from status of a colony'*.

Relating this to education, P192P23FTO stated *'to grant freedom and idependence to education'* and P052I31FZU stated *'Independent education and free from colonialism'*. This was elaborated further by P096M26FNS who said, *'it means that there is being set of changes in the education department which has really brought a huge different compared to one that was uterlized in the era of apartheid.'* In this understanding, the change in political rule has brought about decolonisation of education.

P082M26MNS, however, stated that decolonisation is about *'stopping the continuation of the past injustices in the education sector perpertuated by the oppressive government.'* The fact that P082M26MNS uses the word 'continuation' outlines the acknowledgement that past injustices have not ended with the end of apartheid and alludes that the current government perpetuates the oppression. As Grosfoguel (2007:213) points out, just being located 'in the oppressed side of power' does not meant that one is thinking from 'a subaltern epistemic location'; those who were once oppressed can go on to oppress others. Thus, as important as it is to challenge geopolitical imbalances in power and knowledge production, it is equally important to challenge internal injustices in society locally, such as the incident of the black teacher who *'wished he was white and didn't have to teach black baboons'* (P041C18FZU).

6.7 Conclusion

This chapter sought to respond to **research sub-question 2** through investigating the impact of colonialism, apartheid and coloniality on participants' lives and educational experiences. Throughout the chapter, a recurring theme was material inequalities between historically-white and historically-black spaces. In historically-black spaces, poor-quality infrastructure, lack of adequate resources and under-qualified teachers remained problems. Racial discrimination in these spaces tend to be more inter-tribal or with other minority ethnic groups, rather than with white people. In historically-white educational spaces that are now legally open to all, resources and infrastructure are better, however they are predominantly private or fee-paying institutions and these economic barriers impede access for most black students. When black students do gain access to these spaces, they are sometimes made to feel inferior to whites, with incidences of discrimination in the classroom and broader school environment.

This chapter also highlighted noteworthy differences of opinions between (predominantly non-university) participants and university students (Swartz et al. 2018). While participants did not use the discourse of decolonisation as university students did, they raised crucial concerns of injustices present in their daily lives and education systems that are often overlooked by the broader decolonial movements in South Africa. Both groups raised the issue of historical inequalities where they do not have the support their white (and Indian) peers have in terms of intergenerational wealth and university-educated relatives. Similarly, both groups mentioned cultural-epistemic injustices such as the lack of African heritage and culture in their education, however, the participants were far more vocal about issues at the level of basic education. What emerges more strongly through participants' voices, is that issues in basic education need to be addressed before issues in tertiary education, as this is one of the major barriers to accessing tertiary education in the first place. Regarding the race of educators, university students were far more vocal about lack of black academics, particularly in senior and decision-making positions, and as producers of knowledge. In contrast, participants had various perspectives on the matter as many did not lack black educators in their predominantly-black educational spaces. In some cases, black educators had been perpetrators of injustice against them and in other cases, participants highlighted good experiences with white educators. Thus, participants highlighted more criteria, beyond race, to determine the quality of their educators.

In the question on the importance of the race of the educator, the theme of pedagogy that emerged was particularly insightful. These participants valued having good-hearted, open-

mindful educators, who engaged with them and sought to learn about their backgrounds. Thus, these participants saw pedagogy as more important than the race of the educator as although an educator of their race would bring familiarity, an inclusive pedagogy also allows their cultures and backgrounds to surface in the learning process. Drawing on this, cultural and contextual relevance does not always need to be brought through content or the educators' background but can also be brought in by the teacher in the facilitation of learning. The educator's ability to encourage critical engagement with content and ensure marginalised perspectives are included, is important as content is not always able to accommodate for *all* cultures. Notably, only one participant mentioned her ability to critically engage with what she is taught, indicating a low awareness from others of critical thinking being part of the educational experience.

Many of the issues that participants raised, such as being forced to learn in Afrikaans, or not being allowed to express their cultural identity, are issues that were highly prevalent in times of apartheid but should have decreased significantly immediately after apartheid ended as constitutional changes were made.³¹⁸ Despite changes in the national curriculum,³¹⁹ particularly in terms of language (Section 6.4.2) and culture (Section 6.4.3), discrimination continues to occur in South African education systems, whether explicitly, subtly, or sub-consciously. Such discrimination cannot be resolved by textbook changes but need to be tackled in mindsets and hearts, and in communities and homes. Furthermore, cultural-epistemic injustices need to be addressed such that Western cultures and epistemologies that are *embedded in* education systems need to be examined to pursue systemic change.

Drawing on the question regarding the significance of the race of an educator in the educational experience, the following chapter explores MOOC designers' identities and backgrounds, and how these may shape their open educational practices.

³¹⁸ It was also unclear at times as to which time period participants were referring to when they raised these issues. They could have been referring to past issues. However, given the ages of participants, majority of them would have went to school after 1994.

³¹⁹ The National Curriculum for Grade R – 12 highlights that it is based on principles of 'Social transformation', 'Active and critical thinking', 'Human rights, inclusivity, environmental and social justice', and 'Valuing indigenous knowledge systems' (Department of Basic Education 2019).

7 MOOC Designers: Investigating the impact of embodiment on Open Educational Practices

7.1 Introduction

Whilst the previous two chapters focused on the Potential MOOC Participants, this chapter changes focus to MOOC designers.³²⁰ Lockley (2018:150) highlights that within the MOOC sphere, only 1.7% and 1.1% of MOOC producers are black on Coursera and FutureLearn respectively. While these statistics, and others highlighted in Sections 2.3.3 and 2.4.2, have shown the dominance of OER and MOOC production from certain demographics of people in the Global North, there has been no empirical research to show how lack of epistemically diverse MOOC designers impacts MOOC design. Based on the findings from semi-structured interviews with 35 MOOC designers, this chapter highlights the importance of epistemic diversity, plurality of thought and critical consciousness in MOOC designers to broaden conceptions and enactments of openness in MOOCs.

Noting the dominance of OER, OEP and MOOC producers from Europe and North America, as well as the demographics of these producers, Derry's (2008) observation³²¹ made over a decade ago still holds true that whilst Technology-Enhanced Learning (TEL) 'has concentrated on more detailed questions of learning and pedagogy, the question of knowledge has been neglected' (2008:509), i.e. its epistemologies which tend to be rooted in 'The Cartesian epistemological picture' (2008:514). She argues that while TEL traditionally focuses on pedagogical integration of 'interactivity, scaffolding and dialogue' (2008:509), what is neglected is the epistemological understanding of 'embodied, distributed and situated cognition' (2008:508) that is central to knowledge and knowing. Drawing on this, this chapter responds to **research sub-question 3:**

What is the impact of a MOOC designer's embodied, distributed, situated cognition on their understanding and enactment of openness in MOOCs?

This question is investigated through examining the relationship between MOOC designers and their OEPs, questioning in what ways MOOC designers enact openness in their design, based on their own reasoning of what openness means. This chapter illustrates that MOOC

³²⁰ Portions of this chapter have been submitted as a journal article to Distance Education. The article is in review.

³²¹ While Derry's argument focuses on the importance of the human dimension in learning above the machine, I extend her argument and work to the importance of *multiplicity* of human dimensions through epistemic plurality.

designers create MOOCs that strongly link to who they are, what they value, and how they understand the world. Drawing on these findings, I argue that the epistemological foundations of MOOCs are strongly connected to those who produce the MOOCs. This emphasises the crucial need to have *epistemically diverse* MOOC designers; MOOC designers from different cultures, value systems, and epistemologies.³²² I argue for this, not just for the reason of representation and box ticking but to prevent a *digital epistemicide* (Santos 2014).³²³ defined here as the systematic suppression of marginalised knowledges through digital means.

Particular bodies of knowledge mentioned in the conceptual frameworks are key to this chapter, namely: embodied cognition (Section 3.2.1),³²⁴ embodiment and critical pedagogy (Section 3.2.2),³²⁵ and situated knowledges in decolonial thought and feminist standpoint theory (Section 3.5.2).³²⁶ This chapter takes the following structure. In Section 7.2, I show the strong correlation between South African (SA) MOOC designers' identities, and their understanding and enactment of openness. With particular focus on Black and Minority Ethnic (BME) MOOC designers, I show how epistemic diversity can broaden our understandings of openness. Section 7.3 stems of Section 7.2, highlighting the stark differences between the responses from MOOC designers in South Africa and Cambridge, USA, further emphasising the influence of location, milieu and socio-technological contexts on one's understanding and enactment of openness.

I tread cautiously in this chapter to avoid blanket causal statements that imply that if you have a particular demographic background, you will have a particular view of openness. As I will show in Section 7.2, sometimes, one's privileged upbringing can be the motivator to help others. One can grow up marginalised and go on to marginalise others or help liberate others from marginalisation. Similarly, one can grow up privileged and go on to keep their privileges to themselves or help others access the same privileges. As Grosfoguel (2007) and Freire (1970) point out, the oppressed are often taught to aspire to be like their oppressors, thus a

³²² Recall the difference between diversity and epistemic diversity highlighted in Section 3.5.3.1.

³²³ Santos (2014) coined the term 'epistemicide' and I build upon this with the term 'digital epistemicide'.

³²⁴ Embodied cognition describes that knowledge is formed by interpretation through our sensorimotor capacities, which are rooted in our biological embodiment and shaped our cultural history (Varela, Rosch, and Thompson 1992).

³²⁵ Critical pedagogy presents a pedagogy that allows one to overcome ones preconceived notions and dispositions, through reflexivity, gaining a critical consciousness striving, and towards 'mutual humanisation' (Door 2014; Freire 1970).

³²⁶ Decolonial thought and feminist standpoint theory highlight 'situated cognition' (Haraway 1988), and the importance of the 'locus of enunciation', where '[n]obody escapes the class, sexual, gender, spiritual, linguistic, geographical, and racial hierarchies' (Grosfoguel 2007:213).

critical consciousness is needed for those on both sides of the coin, and those that simultaneously straddled both sides of the coin (Bhabha 1994).³²⁷

7.2 Embodying Openness

The relationship between who the course designer is, and their view of openness, is evaluated in this section.³²⁸ Through analysis of the interviews with the 27 South African MOOC designers, four non-exhaustive categories of analysis emerged, which are presented in Table 7-1. These categories, at times, interrelate, overlap and reinforce with one another and are thus not mutually exclusive.

Table 7-1 Categories of identity

Personal Background	Academic Background	Life Experiences	Political Inclinations
<ul style="list-style-type: none"> •Race •Religion •Culture •Gender •Location •Heritage •Family •etc. 	<ul style="list-style-type: none"> •Humanities •Social Sciences •Hard Sciences •Interdisciplinary •Transdisciplinary •etc. 	<ul style="list-style-type: none"> •Privileges •Hardships •etc. 	<ul style="list-style-type: none"> •Political Movements •Ideologies •Worldviews •etc

Source: Author's own

The first category relates to the MOOC designer's personal background in terms of their gender, social class, race, religion, culture, customs and heritage, amongst other aspects. The second category refers to the professional background in terms of what discipline the MOOC designer comes from and whether it falls under Hard Sciences, Social Sciences, Humanities, Interdisciplinary or Transdisciplinary Studies. The third relates to particular life experiences or conditions that they might have had, or have, such as hardships or privileges. The fourth relates to their political inclinations such as their ideologies or involvement in liberation movements. Drawing on the concept of "academic identities" in a similar evaluation, Ross et al. (2014:58) use "academic discipline, institution, and personal and professional values" to highlight how complex identities of MOOC designers are bound up in the MOOC. Whilst Ross et al. (2014:66) do take note of "national imperatives interacting with teachers' personal values and

³²⁷ One could be marginalised in one sphere of life (e.g. because one's race) but be oppressive in another (e.g. because one's gender or wealth). See Section 3.4.1.

³²⁸ It was interesting to note that different MOOC designers involved in the creation of the same MOOC would have different understandings of what open means, and how it was implemented in the MOOC. This emphasises the role of embodiment in MOOC design.

their own educational histories”, I place greater emphasis on influences from beyond institutional boundaries to highlight how embodied cognition and broader environmental contexts, such as lived experiences, and political or geopolitical influences, impact on one’s teaching. This is particularly important in South African contexts where societal issues flow into the institutional space and cannot be separated (as will be discussed in Chapter 8).

As this section aimed to add more nuance to conventional definitions of openness, outlier examples of those who differ from the dominant were chosen to emphasise the connections.

7.2.1 Personal Background

The examples given below emphasise how one’s personal background, in terms of race, gender, location, parenthood, religion and culture, impacts one’s enactment of openness.

Table 7-2 Openness through broadening the target audience

Personal Background	Understanding/Enacting openness
BME, Female, Parent	<p><i>‘If you look at - and I am one of those - the demographics within Africa- you find out that for the black African woman - you find out that there are a lot of us who go back to school [...] And by the time you get to school you’re married and have children and that is your first responsibility. You are raised to realise that your first responsibility is towards growing your family. Your education, second, no matter what you think about it. So, a lot of us already have families, you have a system growing up, and when you get back to school to juggle it with a lot and I find that for the MOOC, it is an amazing tool for the women who has a home, who has a husband, who has a family to take care off.’ (Nnenna)</i></p>

Source: Author’s own

For Nnenna (MI09F3B)³²⁹ in Table 7-2 openness means to also cater for a student who is middle-aged, raising a family, and balancing various other responsibilities in life. Such a

³²⁹ The MOOC designer’s code is given with the first mention of that MOOC designer, for the chapter. The code embeds the type of MOOC designer, their gender, their university code, and their race. The coding structure is explained in Section 4.7.1 and a full list of the MOOC designer codes is given in Appendix A.

description of a target audience moves away from thinking of MOOC participants as young, single, tech-savvy, independent students, “almost always conceived as Western, white, educated and male” (McMillan Cottom 2015:9). To Nnenne’s target group, customs and norms such as family values and gendered roles (whether one agrees with them or not) are important and need to be accommodated in the design of the course.

Table 7-3 Openness through respecting cultural practices

Personal Background	Understanding/Enacting openness
BME, Female, Parent	<i>‘I think because it is such a visual thing, you need to pay attention to the visual. [...] So, in my culture you find that – and in South Africa I think as well – You find that the woman who is married covers her hair, so for some of the segments I covered my hair, because I had to portray that I’m married, women from my place covers her hair. You cover your hair - so I did that in the MOOC. Because then you reached out to another audience that felt, ya, she understands what she is and is doing this.’ (Nnenne)</i>

Source: Author’s own

The quote by Nnenne in Table 7-3 accommodates for culture in two unique ways. First, she takes into account the role that the visual, the body, plays in making a MOOC accessible. She recognises that participants in her target group may prefer for a women’s hair to be covered, and she accommodates for these cultural preferences making her MOOC accessible to more types of people. Secondly, as she is a married woman of that culture, covering her hair gives her respect and authority because she is respecting her traditional practices. Whilst the first point would be applicable to any MOOC designer, the second one is specifically relevant to her, also emphasising that, in reality, there are different expectations from person to person. This example shows the significance of the bodily aspects and appearance of the MOOC designer, in line with embodiment. One’s attire is seldom discussed in making MOOCs more inclusive, but we see here the pivotal role it can play. Emphasising the considerations Nnenne makes based on her embodied cognition, Varela et al. (1992:149) highlight that ‘the structures of our biological embodiment’ are ‘lived and experienced within a domain of consensual action and cultural history.’

Table 7-4 Openness as overcoming stereotypes

Personal Background	Understanding/Enacting openness
BME, Female	<p><i>'So, I obviously grew up in the days of apartheid, I certainly didn't think of myself as a scientist, I wanted to be a school teacher...[] ... And I think many people are in a similar situation to me, that it never crosses their minds' (Ranjani)</i></p>
	<p><i>'...in fact, in South Africa, at my level, I am probably the only black woman scientist that is Associate Professor' (Ranjani)</i></p>
	<p><i>'I also made a very strong effort to interview local scientists. [...] a different range of people from different parts of the country.'</i> (Ranjani)</p>
	<p><i>'I thought very clearly about making sure there were women, making sure there were black people, young people, you know just so you know it's not just being done by your typical stereotypes we associate with scientists, there are different people and everyone is doing interesting work and people can be retired and they can still be doing research and then there are people that are at the height of their career and then there people who are just starting out.'</i> (Ranjani)</p>

Source: Author's own

Ranjani's (MI08F3B) initial limited vision of what she could be professionally, shown in Table 7-4, emphasises how her race and gender impacted what she envisioned as a possible future.³³⁰ Having broken the glass ceiling herself, she aims to motivate others through expanding their visions of what they could achieve. As she faced various limitations in her journey, her idea of openness is to break cognitive barriers that develop based on stereotypes of one's background. Thus, she places an emphasis on including the voices of BME groups, women, young and old, early career researchers and well-renowned professors as a way of showing how all these different bodies are capable of being scientists.

³³⁰ Her limited vision of what she could pursue professionally resonates with some of the PMPs comments in Section 6.3.1 where subjects like maths and science were deemed too difficult black child and teaching and nursing was instead encouraged (for females).

The quotes in Tables 7-2, 7-3, and 7-4 show that aspects of those MOOC designer's identity that are or were stigmatised, inferiorised, or oppressed, strongly shaped what openness meant to them. By further example, almost all women interviewed in this study mentioned the need to ensure that women access the course, whereas no male interviewee was particularly concerned with gendered access. This correlates with the 'double vision' discussed in Feminist Standpoint Theory which highlights that marginalised groups are socially situated such that they are more aware of inequalities and assumptions than those that are non-marginalised, and this can actually give them an epistemic advantage (Bowell 2019). These broader understandings of openness that stem from BME MOOC designers are often overlooked or unacknowledged in existing enunciations of openness in literature.

The examples above are not meant to imply that only a black woman would be able to understand and implement openness in this way, but rather that they more intuitively come to these conclusions based on their lived experiences as women of colour (Bowell 2019). This is embodied knowledge. It would take more critical reflexivity from a white male person, for example, to be able to have these reflections and ideas. Such an example of this self-awareness is Anthony (MI16M2W), who is discussed in Section 7.3. Similarly, a black woman may not as easily understand problems out of her context and actively need to learn from it, rather than assert her view onto others. What is 'second nature' to one (McDowell 1996:126), may not be to another, but it can be learnt.

7.2.2 Academic Background

In each of the following examples in Table 7-5, we see how MOOC designers' academic backgrounds impact the implementation of and approach to MOOC, beyond just the content of the MOOC.

Table 7-5 Openness in terms of academic background

Academic Background	Understanding/Enacting of Openness
Mathematics, Computer Science	<i>'It's a GPL [General Public License]. It's means the MOOC public licence is creative commons.' (Francois)</i>
Anthropology, History, Development Studies	<i>'let me say, very few of those MOOCs would have been co-created by anybody in the South [...] it's unidirectional, it's not very interactive, some of them are, but the majority of them were just like, here's the wonderful MIT stuff, please use it.' (Anna)</i>
Philosophy, Education	<i>'What I wanted to ascertain from other students is whether it is possible for them to learn autonomously [...] whether it is possible to establish a forum for learning whereby students can articulate their voices. One would say, where by students come to speech or where students speak their minds.' (Ahmed)</i>
Academic Support, Humanities, Linguistics	<i>'So, we all work in academic development, so our job is to improve access for those who are disadvantaged [...] So the MOOC is based very much on that in that we deal with issues of identity but in a broad sense. So, content wise in the MOOC it's about issues of language, of culture, identity.' (Victor)</i>
Health Sciences, Medicine	<i>'I'm really interested in this area of access to education for marginalized people because of my background in rural health and this whole sort of research and career in access to health services rather than education services as such.' (David)</i>

Source: Author's own

In these examples, it is shown that MOOC designers' understandings of openness are in part shaped by the philosophical underpinnings of their disciplines. Francois (MI05M3W) comes from a computer science and mathematics department and while he holds very strong opinions on social justice (see Table 7-8), his definition of openness comes down to open-source licensing. Anna (MS01F2W), on the other hand, has an academic background in History, Development Studies and Anthropology, and views MOOCs through geopolitical imbalances. For her, openness needs to be dialogical and include collaborative efforts.

Ahmed (MI10M4B), whose academic background is in Philosophy and Education, takes a very philosophical approach to the purpose of the MOOC. In another part of his interview, he emphasised his Freirean (1970) philosophical approach to MOOCs. For him, the MOOC was as an experiment on self-directed learning and how one might create a space that gives students the ability to express themselves.

The understanding of openness by Victor (MI13M3B) was impacted by his academic background in Humanities and Linguistics, and his job in academic support. As his job involved administering scholarships³³¹, those who are financially disadvantaged came to the fore in his idea of the target market for MOOCs. Additionally, his understanding of openness is informed by his discipline, dealing with issues of language, culture and identity. As a last example, David (MI11M3W), a doctor working on rural health, looked to open education as addressing needs of marginalised and rural people, shaping them as his target audience.

These five examples are the most explicit correlations between the MOOC designer's profession or discipline, and their understanding of openness, and represent similar correlations throughout all the interviews. This finding, that one's academic background interrelates with one's view of the world, and in particular one's understandings of openness, is critical to highlight. This has implications for MOOC design teams that comprise of people from a similar professional background, for example, technological backgrounds, as lack of input from other disciplines can lead to limited understandings of openness. Those who work across disciplines, such as Anna and Victor, had more transdisciplinary understandings of openness, allowing for a multi-lensed approach.

Anna, who critiqued the geopolitical imbalances in MOOC production, is an example of how a critical consciousness can be gained (Freire 1970). Although she is a white female from South Africa (that is, privileged in some ways), her studies on inequalities in South Africa and geopolitical influences allowed her to view the world order through additional critical lenses. She has additionally put her critical consciousness to action, whereby she created spaces for ground-up, student-led online courses from black students to be made.

7.2.3 Life Experiences

The following two examples in Table 7-6 and Table 7-7 show how certain life experiences impact ones understanding of what it means to be open.

³³¹ This was alluded to in his interview and confirmed upon checking his job description on his staff page.

Table 7-6 Openness in terms of life experiences – disability

Life Experience	Understanding/Enacting of Openness
Raised a child with a disability (in addition to a career in Disability Studies)	<i>'[W]e obviously had to consider to a large degree was accessibility to people with disabilities. I think specifically with visual impairment a lot but also people with hearing impairment so we have been through it uhm.. one of my colleagues, he has developed a lot of skills in online accessibility for people with visual impairment'</i> (Caroline)
	<i>'[I]n fact, I was thinking a lot of parents actually at the beginning, I was thinking mainly about parents, so that they can begin to understand what the potential is for their children and they can also talk to teachers about how their child can go to school and also for teachers so that they can understand.'</i> (Caroline)

Source: Author's own

Whilst already involved in the discipline, Caroline's (MI07F3W) interest in Disability Studies, particularly intellectual disabilities, increased when she gave birth to a child with disabilities.³³² Her personal life experience as a mother of a child with disabilities impacts her research in which she gives specific focus to parenting children with disabilities. This was also evident in the way she created the MOOC, where the inclusion of parents was crucial to her from inception.

As shown in Table 7-7, Craig (MI07F3W) is someone who reflexively discusses the privileges he has been bestowed in life, as well as the unethical means through which his family gained wealth and land. In his personal life, he has attempted to redistribute land to the workers on his farms and resurface its history.³³³ Even in this process, he constantly reflected and revised his methods of engagement and negotiation with the workers, recognising the power imbalances. This ability to be reflexive, to acknowledge one's positionality, and to give voice to others was strongly evident in the interview with him, as well as in his reflections of the MOOC.

³³² This was ascertained through reading a biography of her. To protect her identity, the reference is not added but can be shown upon request.

³³³ There are numerous articles online in which he speaks about his privilege and redistributing wealth, however, they are not referenced here to protect his identity.

Table 7-7 Openness in terms of life experiences - privilege

Life Experience	Understanding/Enacting of Openness
<p>White male, born into family who owns a wine farm, but has made efforts to redistribute land back to the workers.</p> <p>His family's farm was built upon the land of San people, who are partly the ancestors of his workers. He is very interested in resurfacing the history of the land and including lost voices, languages and histories from these lands.</p>	<p><i>'I was speaking, for example, about like the one where I spoke about my farm the one which you mentioned earlier. There's an ideal opportunity to make sure that not only one voice is heard. That's very compelling reasons why you want multiple voices.'</i> (Craig)</p>
	<p><i>'They recorded [San] people speaking those languages so made online dictionaries of all the words and that's partly where this thing that I started with the MOOC with came from.'</i> (Craig)</p>
	<p><i>'The sad fact is that language I was talking about [in the MOOC], there was only two people in the world who still spoke it and that woman who I quoted she's dead and she had died by the time I made that introductory thing.'</i> (Craig)</p>

Source: Author's own

This example shows that while your heritage and 'social location' influences the type of life opportunities you are given, reflexivity, positionality and a critical consciousness allows one to overcome one's ingrained biases and learn from multiple 'epistemic location[s]' (Grosfoguel 2007:213). Following the example of Craig, to step out of this automaticity - our ingrained thoughts, preconceived notions, actions and reactions - dialogue with those different from us is necessary to see things from other perspectives (Door 2014; Freire 1970).

7.2.4 Ideological and Political Influences

The following quotes in Table 7-8 show how ideological influences and political inclinations impact one's understanding of openness.

Table 7-8 Openness in terms of political inclinations

Political Background	Understanding/Enacting of openness
<i>'Because, of course, we were all trained as Marxists, we trained in the 1980s as political economists and you cannot be a Marxist if you don't do history.'</i> (Anna)	<i>'And so, the decontextualization of things were really worrying because students mixed up terminology and people from, say, the 1500s, and talked about their actions as if it happened, like, ten years ago.'</i> (Anna)
<i>'I come from a much older tradition obviously left-wing thought. I am always have a problem with the ANC idea of colonialism vs special kind in South Africa.'</i> (Francois)	<i>'In terms of social justice, I don't think that supplying online courses could remotely replace the inequalities we have in the school system in South Africa. We still have Apartheid.'</i> (Francois)
<i>'So, you'd know now that October 2015 we had the Fees Must Fall. [...] so, a list of demands was submitted to management [...] The last one was basically decolonising the academic space in its entirety.'</i> (Loyiso)	<i>'Ok, so while your interest is more the IT aspect of it which is access and who can access it, how can they access it, which is understandable given that that's your area but for me before we talk access, we need to talk about disturbance and resistance of the status quo.'</i> (Loyiso)

Source: Author's own

Anna comes from a Marxist background, and is particularly focused on history, and how history is written. For her, the current world-order has overwritten political alternatives and political histories, such that alternatives are impossible to fathom. Thus, for her, open education means a thorough revival of these marginalised knowledges, beyond surface level and anecdotal understandings. She particularly makes this comment concerning the decolonial movements happening at universities in South Africa, where students do not have in-depth knowledge of the history of previous movements to learn from their successes and failures. She feels that equipping them with this knowledge for liberation is the best form of empowerment.

Francois highlights that he is of left-wing thought, although critical of the current government. He feels that apartheid-like inequality still exists. For him, structural change at a government level is crucial to address inequalities, and online solutions such as MOOCs are just ameliorative. As will be discussed in Section 8.3.1, Francois raises concern for MOOCs increasing inequality. Thus, his political views shed light on his earlier statement that openness

is just a ‘public license’. Resultantly, in terms of openness in his MOOC, he has not given much consideration for MOOCs as a tool for emancipation as he thinks that systemic change needs to happen at a structural level in the system. Interestingly, he uses the word ‘obviously’ which shows how the South African political context, which is between left and more left, shapes his view.³³⁴

Loyiso (MI20M2B) is one of the few students involved with MOOC design and has played an active role in the #FeesMustFall student protests for free, decolonised education. His views on openness are shaped by the movement, where he emphasises the problem of structural inequalities. For him, before MOOCs can address issues of access, power imbalances first need to be addressed. He thus aims to disrupt the settled systems to which MOOCs are brought into, challenging them at their foundations.

The influence of the social and political spheres on one’s worldview, as in the case of Anna, Francois and Loyiso, is described by Johnson (1987:14):

‘These embodied patterns do not remain private or peculiar to the person who experiences them. Our community helps us interpret and codify many of our felt patterns. They become shared cultural modes of experience and help to determine the nature of our meaningful, coherent understanding of our "world"’.

Thus, our social and political contexts, as well as the history of our social and political contexts, impact the way we think, interpret, and in this case, enact openness.

7.3 Differences between South Africa and Cambridge Interview Sets

The previous section showed how SA MOOC designers’ backgrounds and experiences shaped their understanding and enactment of openness. This section focuses on highlighting the differences *between* the interviewee responses from South African MOOC centres and from Cambridge, USA MOOC centres.³³⁵

As the difference in location is emphasised in this section, a reminder of the composition of the interviewee sets is useful and can be seen in Section 4.7.1. It is important to note

³³⁴ South African politics does not fit neatly into ‘left’ and ‘right’ politics. Given the history of Apartheid and the ruling right-wing National Party at the time, the present-day leading post-Apartheid parties are centre (e.g. Democratic Alliance with 20.77% of parliament seats), centre-left (e.g. African National Congress with 57.5% of parliament seats) or far-left (e.g. Economic Freedom Fighters with 10.79% of parliament seats) parties (PMG 2019).

³³⁵ The Cambridge centres refer to Cambridge Massachusetts in the USA. Not to be confused with Cambridge in the UK.

methodological considerations before proceeding, as this affects what conclusions can and can't be made. In South Africa, given the small number of MOOC designers in the country, approximately 60% of the MOOC instructors within the country (at the time of fieldwork) were interviewed, covering all major sites of MOOC production. In addition, MOOC designers used a variety of MOOC platforms, which added to the breadth of perspectives. In comparison, the eight US interviews were done opportunistically in one city, and at two elite universities within that city, thus they are not representative of MOOC production across the US. Secondly, both Cambridge universities only use the edX MOOC platform, known for its lecturer-centric pedagogy,³³⁶ and this may have limited the diversity of perspectives on MOOC design. Bearing this in mind, these two elite universities collectively produce more MOOCs than the whole of South Africa and are looked up to from around the world as exemplars of online education models, thus their impact and reach is strong. The Cambridge interviews were mainly conducted with managers, instructional designers, and project leads and thus broadly represent the institutional culture and ethos of the MOOC centres, which is of interest here. Noting these crucial differences, this section highlights the differences in understanding and enacting of openness between those interviewed in South Africa and Cambridge, USA.

7.3.1 Distinctive Characteristics of South African MOOC Designers

The quotes in Table 7-9 and Table 7-10 were chosen as they highlighted some of the differences between those interviewed in South Africa and those interviewed in Cambridge, USA.

³³⁶ This is discussed in Section 9.2.3.

Table 7-9 Distinctive characteristics of South African MOOC designers

Attribute	Understanding/Enacting Openness
Positionality	<p><i>‘So because I am a white man, I am aware of the limitations that comes with. In other words, I can never fully understand the black experience, particularly of pain, of marginalisation, of all of that, because obviously the white experience is completely different... There was a very interesting discussion on LGBTQIA+ rights, and it what it means to be gay ... He brought such interesting ideas to the table that it literally deepened my understanding of what the gay experience could be like.’</i> (Anthony)</p>
	<p><i>‘It needs to be a diversity of voices that is connected to Africa. So, the person could be white but it’s about positionality. So, it’s a position. It’s not just the text and the sources, so it’s the diversity of those sources, but it needs to be embedded in an African history, in a decolonized history.’</i> (Anna)</p>
Reflexivity	<p><i>‘I’ve seen its potential and if I were to do one again I would do it very differently in that way. I would be much more mindful of the fact that here I have an opportunity to speak to the world and that that there are things you can build into your message’</i> (Craig)</p>
	<p><i>‘I mean as I say it is a process, one is learning all the time, uhm but I think that we have – I think we begin with acknowledgement that this can be difficult for people to access, what can we do to make it easier, and we are definitely not there’</i> (Caroline)</p>
Financial Stability and Vision	<p><i>‘[W]e made an application to the Vice Chancellors fund and asked for money to develop 12 MOOCs and this was aligned with a move to perhaps offer more courses online. So, exploring online...that’s how the project started off.’</i> (Matthew)</p>
	<p><i>‘[O]ne of the reasons people might want to join edX, from a kind of philosophical, ideological position that they want to go with a platform that is open-source. That is one distinguishing feature of edX so they openly licence their software so ideologically ... it’s the one platform that isn’t a kind of equity vs private venture capital funded.’</i> (Mishqah)</p>
	<p><i>‘So, when people want to do online development for money, we bounce them. We do more public good kind of courses.’</i> (Monique)</p>

Co-creation of Knowledge	<p><i>'So it wasn't just about the professor teaches and the students listen, but the professor listens and reteaches and relearns. So, in that way our learning, I think that learning should be looked at differently. Learning cannot be a unidirectional process, from a dominant person to the dominated, or from the oppressor to the oppressed but learning is the process of mutuality.'</i> (Ahmed)</p> <p><i>'The intended outcomes of the MOOC is to get people co-creating knowledge. ...And it was consciously structured that way so the questions, the discussions and activities were aimed at that. Aimed at people saying this is what I think of this concept. This is what I am doing related to this discussion. This are some examples that I would like to direct you to - We wanted people to tell us.'</i> (Nnenne)</p>
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Source: Author's own

The quotes above represent themes that were present throughout the interviews with South African MOOC designers.³³⁷ Whilst many of the designers had very different ideas of how to enact openness, most SA MOOC designers, like Anthony and Anna, were conscious of the point of view they were speaking from whether gendered, racially, socially, or geographically. It is argued here that in the wake of student decolonisation protests and a revived national conversation on inequality in higher education, it becomes hard as an academic to be unaware of one's positionality.³³⁸ This can be understood through embodied cognition, whereby the environment and social structure around one, influences the way one understands the world. Acknowledging that you are shaped by your positionality, is the first step to overcoming inherent biases as it allows for a critical awareness that other worldviews exist simultaneously (Freire 1970).

Another quality that was strongly present in the SA MOOC designers, such as Craig and Caroline, was the reflexive nature and humility in their efforts to strive for openness. They were very conscious of the shortfalls in their MOOCs, highlighting challenges they faced and aspects that didn't work. They were not afraid to admit these and looked to iterative improvements. Rather than trying to appear to have all the solutions, they were critically

³³⁷ This is not to say that all SA MOOC designers were exactly the same in these characteristics and outlooks, but that these characteristics tended to be the norm and the ethos of the environment.

³³⁸ It is worth mentioning that sometimes this acknowledgement can be superficial, and I would not have been able to know through interviews whether acknowledgements of positionality were rehearsed or genuine.

reflecting on understanding the problems at hand. Regarding access, it was not seen as enough to have the tools or facilities in place to allow for access but looked at the outcomes in terms of who was accessing the MOOCs. This is in juxtaposition to the Cambridge MOOC teams who tend to emphasise and showcase all the tools they are working on for accessibility and the outreach projects being undertaken (See Section 7.3.2). While the South African MOOC designers were probably making more effort than their Cambridge counterparts to make the MOOCs accessible to marginalised groups, they were more critical and reflective that they were still not doing enough.

Regarding the financial strategy of the SA MOOC centres, funding was little and uncertain. Matthew's university was the most fortunate to get funding for 12 MOOCs and they, like other SA MOOC centres at the time of interviews, were very unsure of whether the funding and projects would continue.³³⁹ There was no mention of MOOC designers being paid to make the courses; they were motivated to share their research with a broader audience. The purpose for investing in MOOCs at this early stage was also very exploratory and flexible, largely left to the topics that faculty proposed than a strategic vision. In terms of the vision of MOOCs, both Mishqah (MS05F3B) and Monique (MS03F1W) expressed rationales for MOOCs based on them being for a public good. There was no particular interest to make money out of the MOOCs.³⁴⁰

In terms of pedagogy, South African MOOC designers either intentionally designed their courses to be interactive, such as Ahmed and Nnenne, or highlighted it as one of the shortfalls within their course.³⁴¹ What was highlighted in the interviews, was that those that spoke of co-creation of knowledge, made *conscious* efforts in the design of the MOOC for it to be this way.³⁴² In these cases, participation was not left to unguided, supplementary use of discussion boards but built in as a step of the course. MOOCs that emphasised participation and co-creation of knowledge tended to be the ones on FutureLearn, as the platform emphasises a more student-centred approach. MOOC designers that highlighted lack of interactivity as a shortfall, pointed to platform limitations, particularly on Coursera, edX (and Blackboard).³⁴³

³³⁹ Upon reviewing the rapid growth of MOOCs in SA since the interviews in 2017, it appears that more funding has been granted.

³⁴⁰ The various institutional rationales for investment in MOOCs in SA will be expanded in detail in Section 9.2.1.

³⁴¹ One exception here is Francois who explains his standpoint that his course wasn't intended to be interactive. Even he, however, wanted to learn more about how it could be made to be more interactive. This is discussed in Section 8.2.3.

³⁴² This is discussed in detail in Section 8.2.3.

³⁴³ These platform differences, based on MOOC designers' opinions, is tabulated in Section 9.2.3.

7.3.2 Distinctive Characteristics of Cambridge MOOC Designers

Table 7-10 highlights some of the distinctive characteristics of the Cambridge MOOC designers.

Table 7-10 Distinctive characteristics of Cambridge MOOC designers

Attribute	Understanding/Enacting Openness
Positionality	<p><i>'So, we ostensibly started this movement of openly sharing course materials. Others had done it, not necessarily at the scale and, good or bad for them, not with -without -the name, saying that this top university has decided that we going to share all of our course materials. And then hey, we then going to take the next step and put our courses online.'</i></p> <p>(Calvin)</p>
Philanthropic dissemination of knowledge	<p><i>'And one of the biggest uses was faculty at other universities who wanted to see what we were teaching and how we were teaching it...There's a part of [our] mission statement that our faculty take very seriously ...understanding the opportunity and the privilege that we have of being here to share what we know. We not saying you have to do this exactly the way we do it. We saying, this is what we know and we're willing to engage with you to talk about how you might do something similar but that is meaningful to your context.'</i> (Calvin)</p>
Financial stability and vision	<p><i>'Up to now, they [MOOC instructors] have not been paid by us ... But now we trying to um change that in a pretty dramatic way to um pay the faculty member in partnership with the school so I think the idea is maybe [the MOOC centre] will contribute some, and maybe the school will contribute some, but the courses we will make wherever possible will be a little more strategically aligned with what the school wants to do with regard to offering online courses.'</i> (Bradley)</p> <p><i>'There are 3 main sources: The biggest source is basically a gift from the university. A share of whatever the general endowment from might be. And then we also get some revenue from the sale of edX certificates. we also get some donations through philanthropy from [redacted] through fundraising...In terms of making courses for money. The new</i></p>

	<p><i>pillar in our strategy there is a partnership with GetSmarter. We will make a subset of courses with GetSmarter that have mass market appeal. Hopefully make some money from that to support the wide variety of MOOC courses, because the GetSmarter courses are not MOOCs.'</i> (Bradley)</p>
<p>Techno-centric Pedagogical Solutions</p>	<p><i>'So [our] call is to provide access to high quality content for learners around the world [...] So what we do in our team is first of all provide data analytics. What assessment, what videos should be revised etc. What are the patterns for the users from different backgrounds, different motivations in terms of watching videos, doing the problems, assessments.'</i> (Daniel)</p>
	<p><i>'we have something like 60 - 70% of the learners actually coming from outside the US. One of the studies that we did ... is the support for English second language learners. So, what we are trying to do is to provide accommodations for English language learners and different learners in general. So, one direction for us, for example, is to beyond just being able to download transcripts and certain courses in languages other than English is to provide some accommodations for assessments.'</i> (Daniel)</p>
	<p><i>'We do some studies now on adaptive assessments, how to personalise the assessment, not just in language but also general to make sure that learners will be able to provide evidence on their learning [...] Where we create the adaptive engine and the [...] model where we have a clear sense at every point about the learners. What skills, what knowledge they have already mastered...' (Daniel)</i></p>
	<p><i>'It is a pseudonymous discussion board. So every time somebody goes to a particular page they ... they get a pseudonym on that page which they only keep for that discussion ... So that can be really useful for allowing people to say what's on their mind without fear that it's going to be connected to them as a person and that allows the discussion to be a little more about what you're saying in that moment'</i> (Mike)</p>

Source: Author's own

Calvin (MS07M6U) positions his university as the leaders i.e. ‘a top university’ and trailblazers in open content. These statements are not untrue as Harvard and MIT *are* world-renowned universities and were pioneers in making content and courses open. The problem lies in the underlying tones of superiority evident in the statements.³⁴⁴ They lack a reflexive and critical lens to analyse their positionality.

The top-down, ‘we know best’ attitude is present in the philanthropic aims of open content and courseware. This type of thinking emphasises a unidirectional transfer of knowledge, whether it is to students or teachers. There is no interest in *learning from* solutions in other contexts or creating opportunities for these contexts to learn from each other, i.e. bidirectional or multidirectional knowledge exchange. The terminology of adaptation is still used, whereby content and concepts in the West can simply be tweaked and adapted to local context, as opposed to looking at ground-up solutions that originate from that context.³⁴⁵ Mamdani’s (1997:2) words become apt here in highlighting the difference between knowledge custodians and knowledge seekers:

‘At which point does the claim to pursue excellence turn into a claim of being excellent? What happens when knowledge seekers turn around and claim to be custodians of knowledge? Knowledge seeking is a profoundly humble and a profoundly subversive activity. It’s starting point, Socrates-fashion, is both the admission of ignorance in self and the questioning of truth. Knowledge custody, on the other hand, is more a self-appointed priestly affair, both arrogant and conservative.’

The third category deals with the financial strategy of the MOOC centres. Bradley (MS08M5W) outlined the various sources in which the centre received financial support where there was no worry or concern of whether there would be funding for another MOOC. This point highlights the ease in which elite universities can explore innovative ideas, showcase their research and strengthen their brand name in comparison to less affluent universities. The revenue model of GetSmarter’s³⁴⁶ paid courses funding MOOC development and MOOC designers’ remuneration, also provided greater stability.³⁴⁷ Unlike the SA MOOC centres,

³⁴⁴ I acknowledge here that this is my interpretation and that others may disagree with this.

³⁴⁵ This can also be linked to Section 6.4.1 in terms of how PMPs formed perceptions that digital technology is inherently Western.

³⁴⁶ Interestingly, GetSmarter is a South African company. They have a partnership with the University of Cape Town (UCT) but there was no indication in the UCT interviews that any of the revenue from those courses feed into funding MOOCs in the way that the Cambridge MOOC centre revenue model works.

³⁴⁷ As Harvard and MIT founded edX and founded it on strong ideological principles of openness (outlined by Mishqah), this shift to paid courses is interesting to note.

which were still in a precarious and exploratory phase, the Cambridge MOOC centres are moving towards a much more strategic, long-term vision of MOOCs both revenue and content wise. While the MOOCs are becoming more established, this also brings in bureaucracy and reduces the flexible, spontaneous, sometimes subversive, nature of the MOOCs.³⁴⁸

The fourth category highlighted is the ways in which the Cambridge interviewees seek to improve access and interactivity. Interviewees like Mike (MS10M5W) acknowledge that *'the biggest weakness of edX right now, its lack of interaction with other people'* and respond to these pedagogical limitations with various technological solutions in the hope that these problems can be addressed in a scalable and automated way that is not human capital intensive. With the resources and expertise, the two Cambridge centres can design tools and features to enhance learning experiences beyond what the base edX platforms offer. As outlined by Daniel (MS09M5U) and Mike, some of their latest research projects include learner support for second-language English speakers, creating algorithms for personalised learning paths and personalised assessment paths, and software tools for increasing interactivity. Mike and Bradley also highlighted another tool which algorithmically exchanges viewpoint/rationales pseudonymously between participants who do not share the same stances in order to foster critical engagement. While their technological approaches to improving access and interactivity are very promising, caution needs to be taken with using big data to inform learning design,³⁴⁹ given that the learning patterns being analysed do not include marginalised learners from resource-constrained areas with different cultures and epistemic viewpoints e.g. groups such as the Potential MOOC Participants (Buolamwini and Gebru 2018; O'Neil 2016).³⁵⁰ I am not promoting an anti-technology stance, but flagging concerns that big data learning analytics needs to be undertaken with great caution and deliberation. In contrast, SA MOOC designers' attempts to improve access and inclusivity were more human-centric and personable. Nnenne, Ranjeni and Caroline in Section 7.2.1 and 7.2.3. intentionally focused on including voices of the youth, disabled, non-academic, and black and minority ethnic groups. More examples of their inclusive practices will be highlighted in Chapter 8.

³⁴⁸ The trajectory of SA MOOC centres, once they become more established, is unknown, and they may follow in the same suit.

³⁴⁹ Daniel also raised the importance of working in line with data ethics standards: *'And of course everything is in line with the IRB which we have here on data security guidelines and requirements.'* However, the standards of data privacy laws themselves are not always rigorous or up to date with technological developments.

³⁵⁰ O'Neil's (2016) book on *'Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy'* outlines various examples of failures of using big data to respond to complex societal problems.

One might argue that the sample set of interviews in the Cambridge MOOC centres was too small to make conclusive statements about their ideologies and techno-centric understanding of openness. Indeed, there are most certainly outlier academics and MOOC designers who will go against the grain from within the university. What I am alluding to in this section is not the ethos of individuals³⁵¹ but the overall ethos and approach of these MOOC centres and their respective institutes. To support my argument, a brief review of the research papers from these departments is used to outline the type of thinking adopted in the institution.³⁵² For Harvard, main research relating to MOOCs is conducted from the Office of the Vice Provost for Advances in Learning (VPAL). Research papers from VPAL focus on adaptive learning, adaptive assessment, creation of tools, civic education, content reuse, dropout rates, and understanding users through analysis of data, amongst other topics.³⁵³ By contrast, the research conducted on MOOCs by the Centre for Innovation in Learning and Teaching (CILT) at the University of Cape Town, South Africa's biggest MOOC centre currently, is entirely different. Papers focus on technological innovation in resource-constrained contexts, social justice, inequality and online education, OER in the Global South, decision making processes, and lecturer viewpoints in OER.³⁵⁴

The point here is not that one line of research is more important than the other, but that they are addressing different needs which appear to be shaped by the milieu they are in (Cornbleth 1990).³⁵⁵ Cambridge, being the affluent tech hub that it is, may shape the techno-centric thinking of its faculty. South Africa, with high educational inequality being a national conversation, may prompt faculty to think about social justice and inequality. Both groups are shaped by their immediate context surrounding them, but adaptations to South African conditions *appears regional*, whereas designing for Cambridge conditions *seems neutral and global*.

³⁵¹ As a reflexive point, I am a researcher at the University of Cambridge i.e. an elite university, yet I do not support all the ideals and values of the university. In fact, in many ways, I push back against some of these ideals. Thus, I am focusing on the goals, visions, and ethos of the centre itself. Of course, the centres are likely to attract staff which share their visions and ethos.

³⁵² A thorough systematic review of the research from these two centres would be a chapter in itself, thus only the titles and abstracts (where possible) of the papers were reviewed.

³⁵³ A list of these papers can be found on the VPAL website: <https://vpal.harvard.edu/research>. The VPAL website states: 'VPAL-Research combines expertise in data science, data engineering, software development, and education research to produce analytics and tools that help to transform the entire teaching and learning life cycle.' showing a broadly techno-centric approach to learning.

³⁵⁴ A list of these papers can be found on the CILT website: <http://www.cilt.uct.ac.za/cilt/research>. The CILT website states: 'Recent research includes various aspects of open education such as why academics do (or don't) create OERs, participant engagement in Massive Open Online Courses (MOOCs); aspects of being an academic including academics' experiences and identities and the teaching experience of white academics at UCT as well as the role of social justice in higher education.' Showing a broadly human-centred approach to learning

³⁵⁵ Cornbleth (1990) highlights the impact of contextual factors, such as structural and socio-cultural processes, on curriculum design. This is extended here to MOOC design.

However, *both research groups are simultaneously locally specific and globally relevant*. Cambridge MOOC designers could benefit from the human-centred social justice approaches to make their MOOCs more accessible to diverse groups from within the US and outside of it. Similarly, South African MOOC designers could benefit from the tools and algorithms to make their MOOCs more personalised.

As SA MOOC centres do not have the budget and expertise to develop such tools and features, harnessing of the technical expertise of the Cambridge teams would be beneficial. Both groups and approaches are essential to the Open Education Movement as both the technological innovations and social justice concerns can work together to address inequality in access, inclusion, and co-production of knowledge.

What was interesting to note in terms of embodiment was the standardisation of viewpoint among the Cambridge designers, despite their visible diverse ethnic backgrounds, albeit from a global academic elite. Unlike the South African MOOC designers, there was no mention of race, class, privilege or inequality. From this we can draw that one's background in terms of race, gender, nationality, etc are not universal as an advantage or disadvantage, but rather context specific. It also impacts one's embodied cognition to varied extents depending on the context. For example, how one's race is viewed and treated in one country, may be different in another based on that country's formulation of racial identities.³⁵⁶ However, in the 'modern/colonial capitalist/patriarchal world-system'(Grosfoguel 2007:217), the 'colonial matrix of power' tends to dictate hierarchy globally (Mignolo 2007:155). This was evident through Lockley's (2018:150) findings on the low contributions by black MOOC designers (See Section 7.1).

This finding of homogeneity-in-diversity might seem to contradict the main point being made in the chapter - that diversity of MOOC designers is important for plurality in content, pedagogy and epistemology - if those that appear diverse still have a standardised, in this case techno-centric, viewpoint. Grosfoguel's (2007, p. 213) nuance in the differentiation between 'epistemic location' and 'social location' becomes very useful here. Whilst the 'social location' of the MOOC designers is diverse ethnically/racially, they are all rooted in similar 'epistemic locations'. It is argued here that the dominant Cambridge-centric second nature of the

³⁵⁶ The USA, however, is quite racialised in a similar way to South Africa, and so the lack of mention of this in the interviews was particularly surprising. One explanation given is that the small interview set was done in an affluent, academic region where people are likely to have similar mindsets.

institutional environment they are in tends to overpower the epistemic diversity that could have been brought in through their diverse backgrounds.

What can also be drawn from this section is the ‘double vision’ that the South African MOOC designers have, being able to see the marginalised-privileged, oppressed-oppressor, local-global divisions that shape the Open Education Movement. This double vision can actually give them an epistemic advantage (Bowell 2019). This is evident in MOOC ratings where South African MOOCs, albeit few, are ranking as the top MOOCs around the world (Middleton 2019; Sunday 2017). Those on the dominant side, in Cambridge in this example, do not have this double lens, but can strive for a ‘critical consciousness’.

7.4 Conclusion

This chapter showed that openness extends beyond a static concept that is disjoint from context and person. Responding to **research sub-question 3**, I illustrated that MOOC designers create MOOCs that strongly link to who they are, what they value, and how they understand the world. This is consistent with Ross et al. (2014:62) who noted in their MOOC that ‘Our MOOC’s history, rationale, and design are all tightly bound to our identities as academics and our teaching philosophies.’ The examples in this chapter illustrate that openness is understood and implemented differently by MOOC designers based on their locations, histories, worldviews, subjectivities, mannerisms, personality, and character, amongst other aspects. The enactment of openness (or lack thereof), based on one’s personal background, academic background, life circumstances, political inclinations, was termed here as ‘embodiment’. Drawing on conceptualisations of embodiment, the body of the MOOC designer, as well as their language, culture, gender, location, experiences, living conditions, family structure, and other factors, shape their epistemologies which in turn shapes their MOOCs. Kanen (2012:638) highlights this point in relation to classroom education, emphasising that who the educator is, changes the dynamics of the learning space as it is ‘infused with the interrelations of the pedagogical intentions of the instructor, the embodiments that speak for the instructor, and the interactions of the students and their identities’. I extend this to the online learning environment.

As the way in which openness is understood impacts the way one in which it is enacted, this study asserts a new way of looking at OEP, from something extrinsic that is done *to* something to make it open, to something more intrinsic: to *be* someone that is more open. This is termed the ‘embodiment of openness’. Rather than MOOC designers being seen as *creators* of OERs or *implementers* of OEPs, they are *embodiments of openness in themselves*. With this

human-centric view of openness as embodiment, attempts to “write the complexity of the teacher out of the MOOC” (Ross et al. 2014:58) can be overcome through re-emphasising how the complex, embodied nature of MOOC designers impacts the design of their MOOCs. This understanding of openness-as-embodiment adds another layer to current conceptions of OEP highlighted by Cronin (2017) in Section 2.3.2.

In this conception, the MOOC designer goes *beyond* an extrinsic design process of producing something that is open, to an intrinsic reflexive process of being, manifesting and embodying openness as a mindset and a bodily state. This view thus moves away from seeing MOOC designers, or open education practitioners in general, as objective educators implementing static content or textbook practices, but rather incorporates their subjectivities into the process. Once these subjectivities are acknowledged, MOOC designers can then proceed to critically reflect on their own positionalities and transform their thinking through gaining a critical consciousness. Drawing on Freire (1970), no change in the world can take place without the transformation of individuals, particularly those on the dispensing side of education. Thus, critical reflexivity is needed by MOOC designers if they aim to create an environment for an empowering education, which is arguably the aim of open education (CPT+10 2017).

Through highlighting positionality, this chapter stresses the crucial need to have epistemically diverse MOOC designers from different locations, classes, cultures, value systems, and epistemologies. Diversity does not mean inclusion through assimilation and homogenisation, but true embracing of different ways-of-knowing and ways-of-being. Through MOOC teams including more epistemically diverse designers, MOOCs are more likely to be inclusive, open, relevant and beneficial to a broader diversity of learners as well as counter for the dominance of Western-centric epistemologies in MOOC production. Achieving this epistemic diversity in MOOC production is no easy task, however, as practical challenges in open production exist such as labour and time of educators, cost of production, and skilling of production teams (Laverde and Arias 2015). This amplifies the concern for an impending digital epistemicide, where only dominant Euro-American epistemologies survive as learning designs do not take into account the contexts of those on the periphery.

Although emphasising the importance of diversity, this chapter has also shown the importance of gaining a critical consciousness to overcome one’s preconceived notions about the world (Freire 1970; McDowell 1996:126). As shown in the examples of Craig and Anna from relatively privileged backgrounds, through conscientisation and reflection, they have gone on

to strive to counter the forces and systems that cause inequality. Conscientisation and engagement with epistemic diversity promote mutual humanisation and are key reinforcing features in ensuring that one does not perpetuate injustices (Freire 1970).

With a rising global elite that is often more similar than not (Rizvi 2007), such as in the case with the Cambridge MOOC designers, further complexity is added to the challenge of including epistemic diversity. Thus, further research in OEP needs to look beyond country representation, to focus also on intra-country inequalities and lack of representation of certain groups and epistemologies *within* the Global South *and* North countries.

Lastly, this chapter was premised on conceptualisations of embodiment that focused how meaning is constructed through bodily experiences in particular contexts. The other focus of embodiment in educational practice is the physical, kinaesthetic parts such as learning through “movement, gesture, touch, gaze, body positioning, as well as talk, speech and representational forms such as written, text, audio, and image” (Leigh 2019:175). These aspects are crucial to embracing different ways-of-knowing but were not unpacked here because the MOOC designers did not speak about them, which in itself is a concern. This angle of embodiment highlights particular shortfalls in OEPs used in MOOCs and needs further research. MOOCs primarily deal with knowledge entering in through the mind, with little acknowledgement and inclusion of the body in the process of learning. Whilst MOOCs make use of image, text and audio, further research in OEP could draw on practices that include epistemically diverse ways-of-being and knowing such as kinaesthetic practices that engage the whole body – including its links with memory, culture, emotion and history – in learning processes.

In conclusion, this chapter presented understandings of openness and open educational practices from MOOCs designers, including BME MOOC designers. These views from the margins contested and broadened conventional understandings of openness that are shaped by dominant practices and epistemologies in the Global MOOC movement. Through conceptualising openness-as-embodiment, a shift in understanding OEPs is argued for, whereby MOOC designers should not be understood merely as producers of open content or stewards of open pedagogical practices, but as manifestations of openness themselves. This further emphasises the need for epistemically diverse MOOC designers if striving for MOOCs that recognise the plurality of knowledges that exist in the world. This also means inclusion of voices that one may not agree with politically or ideologically, if at the very least to challenge and critically engage with.

8 MOOC Designers: Exploring conceptualisations and approaches to addressing injustices

8.1 Introduction

Since the 2015 and 2016 #RhodesMustFall and #FeesMustFall student protests in South African universities, there has been renewed interest in themes of decolonisation and social justice in education, prompting calls for a more socially just and liberating education.³⁵⁷ Whilst the student movements have raised awareness of the structural injustices embedded in our education systems, institutions and educators are still investigating how best to respond to this call (Lange 2019:83).

As educators' views are impacted by these discourses, these views in turn impact their learning design. Keddie (2012:264) highlights this, stating that teachers' views on justice and social good 'shape the ways in which they understand and approach student difference and disadvantage'. She further highlights that whilst most educators agree on the importance of 'remov[ing] the barriers or obstacles that prevent some students from participating on par with their more privileged peers, there is far less agreement about what these obstacles might be and how they might best be overcome.' (Keddie 2012:264). In South Africa, various discourses, debates and discussions have been circulating, highlighting the tensions in how justice is conceived and how injustices should be dealt with. These discourses, particularly those of social justice and decoloniality, have multiple meanings, connotations and implications, leaving educators confused and conflicted on how to address injustices.

This chapter looks at South African MOOC designers, a specific sub-set of the academic body, to understand how social justice and decolonial discourses have impacted their views.³⁵⁸ Based on the premise that educators' views on justice impact their approach to learners and learning design (Giroux 2003; Keddie 2012), this chapter thus responds to **research sub-question 4:**

What are South African MOOC designers' conceptualisations of justice and how do they attempt to address these injustices in and through their MOOCs?

³⁵⁷ As the movements grow, they have prompted calls in other parts of the world as well, such as the #RhodesMustFallInOxford and 'Why is my curriculum white?' movements in the UK (Elgot 2016).

³⁵⁸ Portions of this chapter have been submitted as a journal article to Journal of Interactive Media in Education. The journal article is in review.

Through interviews with the 27 South African MOOC designers, it was seen that ‘social justice’ and ‘decolonisation’ are words that have a multiplicity of meanings and connotations in South Africa. This was particularly clear through one interviewee’s comment that ‘...*you could decolonise and still have an enormous amount of injustice*’. Thus, to gain clarity on MOOC designers’ responses to questions of how to address injustices, it was necessary to step away from the jargon of social justice and decolonial discourses that often confused and misconstrued their arguments. For this reason, the Dimension of Human Injustice (DoHI) Framework is used to analyse injustices and avoid the baggage that the discourses may bring (Section 3.6). This assists in putting aside narrow interpretations of particular discourses, for example, social justice being equated to economic justice, or decolonial movements being interpreted as Africanisation, and works towards a more holistic mindset that can better tackle the multiple dimensions of injustice in our educational contexts and bring about learning designs that better support learners. Using the DoHI framework, I show how different MOOC designers conceptualise and aim to address injustices, some placing greater emphasis on cultural-epistemic injustices embedded in geopolitical inequalities, and others on material injustices that need addressing at societal and national levels. This chapter takes a microscopic view looking at specific viewpoints of MOOC designers, which then feeds into a more holistic, macroscopic overview for designing justice-oriented MOOC in Chapter 9.

The outline of this chapter is as follows: Section 8.2 looks at MOOC designers who address cultural-epistemic and geopolitical injustice, outlining the importance of relevant education, and inclusive practices and processes. Section 8.3 looks at MOOC designers who centre material and political injustices as the main injustice to address, focusing on open content and technological accessibility. In both sections, I first outline conceptualisations of justice in the former subsections, and then build towards practical attempts to address these injustices in the latter subsections.

8.2 Cultural-epistemic and Geopolitical Injustices

While MOOC designers spoke across a range of injustices, what is highlighted is the emphasis certain MOOC designers placed on a particular dimension of injustice. Due to irreducible complexity, this section deals with the epistemic and geopolitical injustices together, as it emerged that MOOC designers address these dimensions together. MOOC designers who raised concerns about cultural-epistemic injustices used words such as ‘*knowledge*’, ‘*culture*’, ‘*context*’, ‘*relevant*’, ‘*situated*’, ‘*black*’, ‘*white*’, ‘*diversity*’, and ‘*epistemic*’ to describe their

position. In describing geopolitical relations, words such as ‘*producers*’, ‘*colonial*’, ‘*decolonial*’, ‘*Global North*’, ‘*Western*’, and ‘*indigenous*’ were used. There was an emphasis on privileging marginalised groups and knowledges to give them the same standing as those that have been privileged. Due to the copious amounts of data, this section is presented mainly as a narrative of Nnenne (MI09F3B)³⁵⁹ who was the most passionate about addressing cultural-epistemic injustices. Where relevant, complimenting or differing statements from other MOOC designers are added.

8.2.1 Making Education Relevant

Through the language of decolonisation, Nnenne describes a transformative education as one that is created by and for its context, emphasising the situatedness of knowledge, and the necessity for education to respond to the needs of that context:

*‘A **decolonised education** would be, an education that gives back to the people That gives back to its **context**. An education that grows, that takes **FROM** where it is **situated**. Makes it into something more and develops where it was taken from. It goes back in, and makes something new, something better... It’s **transforming**, that’s the word I am looking for’ (Nnenne)*

Similarly, Victor (MI13M3B) also emphasises relevance through a constructivist understanding:

*‘The notion of decolonisation probably, it’s about making ... it’s about **constructing** knowledge that is **relevant**, first of all, to particular people in that **context**.’ (Victor)*

For Nnenne and Victor, knowledge must be rooted in that context, must be relevant to it, and must give back to it. Nnenne further notes,

*‘I think that a non-decolonised knowledge is a knowledge that is not sustainable ... If it is not **taken from**, and **feeding back**, and **growing**, and transforming where that knowledge is situated ... if education you are receiving cannot make you **identify yourself** in that education... You need to see yourself in it ... You can’t look and look and only see strangers in what is being discussed.’ (Nnenne)*

With this understanding of transformation, she argues that knowledge should not only be relevant to the place and the people but should also evolve over time with them. Relevance

involves acknowledging one's historical roots as well as one's present-day needs and contexts. Given what Fanon (1961) and Bhabha (1994) allude to in terms of culture evolving along with our hybrid identities, relevance needs to reflect this.

In Caroline's (MI07F3W) understanding of decolonisation, she places less emphasis on whether knowledge *is* local, but focuses on how it can be critiqued and re-envisioned locally and *made* relevant:

*'...and I think by encouraging students to **apply it to their own contexts** and to take concepts and to test them ... we are not definitely not coming in with "this is the way it is and this what it is all about", we are coming in with concepts that participants can test in their own environment and talk about in their own environment.'* (Caroline)

Francois (MI05M3W), on the other hand, raised concerns of superficial attempts to make content look more relevant:

*'I am very wary of saying that just because **your example is closer to people's lives** that you have **adapted it to local contexts**. I actually don't trust that... **I don't think that it would make much difference**. I think that I see all these school textbooks where they replace Jannie with Thabo and I think what the hell. Just because you call somebody Thabo you say that this is now digestible for Xhosa speaker. I think not.'* (Francois)

When he says, 'it won't make much difference', this is understood as it won't make much difference to their material conditions, which he elaborates on in later in Section 8.3.

For Priya (MI12F3B), who had a more outward-facing MOOC model, content solely tailored towards African contexts might exclude students from outside the continent:

*'So decolonizing the curriculum here would probably mean including some of the **other voices** as well. South African scholars or African scholars, readings from the continent, students call for more visibility of indigenous knowledges ... But globally, if we are offering a MOOC to the world and we have only South African scholars who are being represented on the course then **aren't we excluding students from outside the continent?** We want to certainly give them exposure to the South African voices because the MOOC is located very much here, but at the same time we want to have other voices as well that would speak to a **more global audience**.'* (Priya)

Not all MOOC designers saw the need to make others more aware of African contexts and

knowledges. In discussion about the benefits of sharing African concepts with the global pool of participants, Francois thought that this was not the purpose of his MOOC:

'I really do feel that it is just not my job to conscientise people from the US and I think that if somebody really gains that from this course, they probably sort of pre-adapted. So, they probably don't need much conscientising anyway. People that are really need conscientising are just going to be irritated.' (Francois)

We see here that MOOC designers have different understandings in terms of relevance. Firstly, what making a MOOC relevant means; whether it needs to be *from* and *for* the community it aims to reach, or if it is enough to be *made* relevant to the target group. Secondly, who the target group is; whether it is aimed at the local or the global impacts on how one goes about make a MOOC more relevant. Thirdly, whether the showcasing of local knowledge is useful to and desired by others; would the global audience appreciate a local touch and cross-cultural learning or feel excluded by its lack of applicability to their own context.

8.2.2 Unpacking Epistemic Injustices

Nnenne articulates a nuanced understanding of the role of race and nationality in overcoming epistemic injustices, highlighting that the mere identity of being black or African does not always translate to a decolonised outcome:

*'So, there is this **epistemological** grounding as different from you so even if you, even if you living here, you're an **African** ok, you are **black** like me and you standing here, is your epistemology African? Because you have just been here, **doesn't make what you produce a decolonised thing**. So, while I am saying that the person who is black or who is an African ... It's a factor but not the factor'* (Nnenne)

Loyiso (MI20M2B) makes a similar point through highlighting how we shouldn't toss away the work of white intellectuals:

'...Basil Davidson who has written 70 books on Africa. He is white. He is British. He is ex-military. ... I think oh my gosh he's got so much that I can take from his material! How do I dismiss all of this work, dedicated all of these years by this white person? So, I'm trying to say here that it is not a is not a straightforward answer ... there's a lot of dynamics to be considered. Of course, an outsider will always have their limitations for whatever reason, on the basis that they are an outsider, but we should be careful again,

our definition of an outsider, is it culturally, is it based on race, what is it you know?’
(Loyiso)

Monique (MS03F1W) pushes this point further, through the example of African politicians who may perpetuate rather than combat injustices. She further highlights the general difficulty in delineating where knowledge is from, moving towards the entanglement of knowledges, rather than regional knowledges.

*‘Then there’s the thing of, like, what are **indigenous knowledges** and **Western knowledges**? ... I’m not sure that it’s enough that the people you interview are **African politicians** ... It’s an intellectual trap that you can only decolonize when you’ve divided in your mind what are Western knowledges and indigenous knowledges.’* (Monique)

Ahmed (MI10M4B) goes on to describe justice as something that is completely colour-blind:

*‘The person presenting the MOOC should be a person who is committed to the enhancement of justice.... If you have a person committed to justice, you will become **colour-blind**. So even the very idea of race to me is a human construct. **There is no such thing as race**. We create those false categories. And then we will assign it to particular people.’* (Ahmed)

This understanding of justice differs from the previous interpretations of justice presented, which place at least some emphasis on historic racial injustices.

Through these conceptualisations of epistemic injustices, we see Jansen’s (2017) categorisation of decolonial discourses emerging as well as being contested; that of Africanisation (knowledge for and by Africans only) critiqued by Nnenne and Loyiso, Afrocentrism (knowledge that can transformed to be made most useful to Africans) promoted by Nnenne and Loyiso, and entanglement (that knowledge does not have strictly delineated regional boundaries) described by Monique.

What emerges from these comments is that MOOC designers acknowledge that while race, region and nationality are important factors to consider, their inclusion does not automatically translate to cultural-epistemic injustices being addressed. This point is articulated well by decolonial thinker Grosfoguel (2007: 213) who distinguished between ‘epistemic location’ and ‘social location’. The complex views of the MOOC designers in this section, correlate with

Potential MOOC Participants' broad-ranging views regarding their views on the race of the educator teaching them, outlined in Section 6.5.³⁶⁰

8.2.3 Inclusive Practices and Processes

The importance of inclusive processes was stressed by MOOC designers that focused on cultural-epistemic injustices. Nnenne makes a crucial point that one needs to be explicit and conscious throughout the process in order not to promote colonial agendas. This involves being conscious and explicit about how and why decisions are made, and who is included in the decision-making process:

*'It needs to be conscious. If it's not conscious, you will **end up promoting colonial agenda** ... that's my stand from the beginning. When we planned it, we spent I think the first five meetings we talked about the ethos, that's what we discussed. **The ethos of the MOOC**, for us, that was the most important thing. I mean content is available. We have been doing this. We have content. But the ethos, we really, we spent the first few meetings, just unpacking the ethos of this MOOC.'* (Nnenne)

As part of this process, she emphasised the need to have a plurality of voices at initial design stages:

*'[W]hen we talked about the ethos of the MOOC, we had these conversations across board. We had the **black** South African, the **white** South African, we had a **Muslim**, we had [an] **African foreigner**. So, what we did was we all came together to discuss...'* (Nnenne)

Linking to Chapter 7, Nnenne also highlighted how she saw the course as a connection of lives, rather than delivery of content, and attempted to connect in a personal, deep, and meaningful way with the participants:

*'[W]e appealed to the **cultural context** by being **conscious** of reaching out to the diversity within our framework. I think that's one thing - by being conscious of the **presentation of ourselves** and what we see ... We tried to bring the personal into this because we realised that, again, Africa's very much based on the collective... And it*

³⁶⁰ The Potential MOOC Participants' responses were varied, some wanting an educator of the same race, because they felt understood, respected and comfortable. Others were open to educators of different races and saw it as a positive in terms of cultural exchange. There were some cases where PMPs were treated badly by black educators and kindly by white educators, which added further complexity.

*wasn't just a MOOC that was being delivered, we realised that **we are dealing with lives** ... So, we tried to, how should I say, **give it heart.**' (Nnenne)*

Through focusing on the collective, African philosophies of education are brought into the course (Metz 2015), beyond just the content being African.

In drawing on the collective, the aim of their MOOC was to include the breadth of people involved in education:

*'Teachers ...parents, organisations that work with parents as well. **Children with disabilities, school management.** And when I talk about school management, I am not talking about the principal and vice principal alone. I am talking about **the security guard** at the gate, I am talking about **the maintenance guy, the lady who cooks the school lunch**, we wanted all of them to understand that inclusive education doesn't just happen in the classroom.'* (Nnenne)

Through this process, Nnenne highlight the importance of creating a sense of belonging in the MOOC.

*'And our aim was to remove anything that could be a barrier to people accessing this MOOC. And so, we needed that knowledge base around the **sensitivities within the diversity and the culture** ...Because we had to remove anything that makes them want to say 'No'. Or, 'They are not speaking to me'. Or, 'They are not reaching me'. What would reach communities?'* (Nnenne)

Ranjeni (MI08F3B) also emphasised the community of practice that formed in her MOOC:

*'I think all of these people **think of themselves as friends** because there is now this **community of people that are sharing and talking to one another** ... an international community that never existed before ... it really became quite unique that it drew **all these different people together**'* (Ranjeni)

Ahmed further emphasised a Socratic approach to co-creation of knowledge, giving students the platform to voice their thoughts, ideas and opinions, and to challenge what they were being taught:

'I mean not to be dependant only on the professors for knowledge constructs or knowledge ideas ... And I found out that the comments students made, the insightful contributions they made to the course ... taught me that it IS possible [online] for

students to speak their minds, construct ideas, disagree with others, and even to take issue with me ... and even extend some of the ideas and examples that I exposed them to and that to me means that they have taught me more than what they have learnt and that's also how I see a MOOC. I see a MOOC as an online course whereby students construct meanings. ' (Ahmed)

This Socratic approach which focused on debate and deliberation, was different from Nnenne's social constructivist approach of representing a plethora of diverse and equally true voices. This pedagogical difference is expanded on in Section 9.5.3. Another interesting distinction between Nnenne's approach and Ahmed's approach is that they both conceptualised marginalisation differently. While Nnenne focused on low-income countries, and race groups that have been disadvantaged, Ahmed explains:

'if you have a skewed understanding of knowledge, you are marginalised in any case. And that doesn't mean that your accessibility to resources implies that you are more privileged than others. For me you can have that kind of dominance or you can be privileged, but you can also be marginalised.' (Ahmed)

Thus, for Ahmed, anyone who has not had the chance to gain a critical consciousness, is marginalised. With this understanding, he envisioned justice is more to do with the liberation of the mind than economic liberation:

'For me, the purpose of education is to cultivate human forms of justice ... to show that in the minds of certain people was an educative agenda that was strongly linked to the cultivation of human forms. Not just human, non-human as well, particularly environment and protection of the environment, protection of the universe and the earth. So, at the core of any form of learning, is our argument, must be the enactment of justice.' (Ahmed)

Here a distinction needs to be made between a course that theoretically explores concepts of justice and aims to liberate the mind, which is what Ahmed describes, and a course that is designed and implemented in a way that strives for justice, which is what Nnenne describes. Distinctions start to emerge such as *justice-as-pedagogy* versus *justice-as-process*.³⁶¹ Although Ahmed focused on co-creation of knowledge (*justice-as-pedagogy*), it was at the implementation stage, and with little efforts to overcome material barriers that limit the

³⁶¹ Thanks to Sarah Lambert who categorised my long-winded thoughts into catchy phrases.

plurality of voices. For Nnenne, emphasis on including a plurality of voices from inception to implementation (*justice-as-pedagogy* and *justice-as-process*), addresses both cultural-epistemic and material barriers. Bali (2018:305) argues that ‘[a]ttempts at inclusion can only be authentic and meaningful when we make the content, process, and outcome of education more egalitarian, open, and inclusive.’

In contrast, not all MOOC designers placed an emphasis on participation and interaction, particularly when content was more technical. In some cases, as highlighted by Francois, participants just wanted to dip in and out to get the information they needed:

*‘I haven’t participated that much ...Umm, it seems to me that **this was not a MOOC that was attempting to get student interaction**. And the only forced interaction that we have is there are two assignments are peer reviewed...There are boards like that and they are reasonably active I think but they are not very active. It’s partly because the **majority of people who are doing this are experienced** and they are doing it so that they can get a **quick look** at ...[redacted]... and not really getting into the nitty gritty.’*
(Francois)

Although Francois didn’t design for much interaction, he also admitted he was still learning and open to finding out about how participation could be implemented more in his type of MOOC that was more hard sciences focused.

While the aforementioned MOOC designers reflected on interactivity in the MOOC, Riyaadh (MS06M4B) added that this type of interaction strongly depends on the MOOC platform design:

*‘[W]e are also happy with the **pedagogical design** of how FutureLearn runs and how it is structured in a way that **facilitates conversation** and we feel strongly that education needs **engagement** whereas edX and Coursera is very, “here’s your instructor and he is going to tell you everything you need to know” and that’s it.’* (Riyaadh)

Nnenne, Ranjeni and Ahmed’s MOOCs were on FutureLearn. The connection between platform and pedagogical approach will be highlighted in detail in Section 9.2.3. The influence of the platform design on shaping how learning is structured is also emphasised by Monique who alludes that epistemic injustices could be embedded into the design of platforms:

‘...whatever knowledge or information you have, it’s behind an interface. And that interface in the same way as a grammar and a syntax, it shapes what is possible to say

*and think. And that interface is very very very much **produced in the Global North.***
(Monique)

Monique's comment bears resemblance to Ali's (2017) critique of the 'embeddedness of coloniality' in IT (Section 3.5.4). Just as the design of platforms limit how one can learn and interact, language limits what one can say and how one can express oneself, and this is unpacked in the following section.

8.2.4 Languages Choices

Within the South African context, MOOC designers chose English as it is the country's main business language and most common language used in higher education, although it might not be its citizens first language.³⁶² It is also the language of the MOOC platforms that were used, and English would allow the MOOCs to have wider reach, in comparison to using a local language.³⁶³ Despite this being the choice, Chris (MI03M1W) acknowledged of the colonial legacy of the language:

*'Well let's start off by saying that it is presented in **English**, which is a **heavy legacy of colonialism**...We are having this discussion in English.'* (Chris)

While there was not much deliberation by MOOC designers over choosing English as the main language, there was when it came to choosing languages in which subtitles or captions should be provided. Riyaadh highlighted their choice:

*'We actually want the vast majority of Africans to be able to do the course, the course is going to be translated into **French and Arabic**.'* (Riyaadh).

Nnenne similarly noted translating to French so as to accommodate participants from other LMICs. The choice of French over African languages is notable and is unpacked in Section 9.4.2. Chris outlined that human and financial resources were the barrier to having more translations:

'[I]t seems to me that other than human resources aspect of doing it, it seems like it is very doable and there is no technological barrier to that, it can be done. It is more a

³⁶² Recent census from 2019 showed that only 8.1% of South Africans speak English inside the house and is the 6th most common household language. Outside the house it is spoken by 16.6% of South Africans and is the 2nd most common language outside the household.

³⁶³ The choice of a MOOC language is more difficult for MOOC designers in other countries where a 'global' language was not widely understood. Interestingly, those countries have thus been faster to build local MOOC platforms catering to their own contexts. India and China are good examples of this (Trehan et al. 2017).

resource barrier. So I think that would be very beneficial to be able to do this in different languages. ' (Chris)

Evan, whose MOOC had a more technical focus, disagreed with the need to translate content, arguing instead for one universal language for education:

'None of them, just English. And I do not agree with the fact that they have to be translated ... I feel that the world needs to be English, the world needs to choose the language. I think things are lost in translation and there might be an argument for things being enriched ... by translation but as far as scientists are concerned, we should all speak one language. We don't speak a different mathematics all over the world, and that's the success of it.' (Evan)

It is worth noting here the importance of being able to revise and reuse content. While a MOOC designer might not have the time, resources or motivation to translate to other languages, if the content is open, others are able to do so:

'I just launched [MOOC name], I was immediately contacted by some university in Argentina that asks could they translate it on my behalf because they wanted to use it locally because they don't have a course on that.' (Evan)

On the other extreme, Nnenna was not only concerned with the language, but also the sub-text, ensuring that it would not be misunderstood or offend anyone:

'We had ... someone who is going to read this text, and then they are going to read in between the lines as well. There's a message we are giving out. So balancing that was a struggle.' (Nnenna)

Similarly, Caroline was also very aware of the level of complexity of the language used:

'[W]e try to choose context that would be relevant, to use language that is simpler and not technical because a lot of our participants English would be their second language, even though they might be professionals, and we do, we have a lot of participants from non-English speaking countries' (Caroline)

Thus, in considering language, it is not only the language choice, but the difficulty level of the language used, and underlying assumptions and messages that are often infused into language. The choice of language and translation of MOOCs is possibly the biggest factor that impacts who will be able to access the MOOC. It is a cultural-epistemic injustice, yet this barrier was

not really responded to by SA MOOC designers. This shows a strong mismatch with the concept of massiveness and an aim to support marginalised groups in their languages.

8.3 Material and Political Injustices

Addressing cultural-epistemic or material injustices should not be seen here as mutually exclusive whereby MOOC designers chose one or the other, but rather different leverage points that MOOC designers placed more emphasis on to strive towards a more just world. Words that were used to describe material injustices were ‘*equality*’, ‘*economic*’, ‘*resources*’, ‘*fair*’, ‘*access*’, ‘*fees*’, ‘*money*’ and ‘*infrastructure*’. Words that were used to refer to local politics were ‘*townships*’, ‘*local*’, ‘*municipalities*’, ‘*society*’ and ‘*community*’. This section is presented through the narrative of Francois, whose main concern was material injustices in light of political injustices. His sentiments are complimented or contrasted with opinions of other MOOC designers where necessary.

8.3.1 Critiques of Decolonisation

Some MOOC designers critiqued the term decolonisation due to the ambiguity of its meaning. In highlighting the need for equality and fairness, Francois felt that decolonisation was not the solution, where he conceptualised decolonisation as a rejection of everything Western and colonial, including the white citizens of South Africa:

*‘What I would like it to mean is a **fair deal** for everybody in the country ... you could **decolonise** and still have an enormous amount of **injustice**. And I suppose that is my problem with it. If you just - in the extreme situation - if you kind of went **completely Albanian** and you kicked out all the whites and you have a totally isolated society clearly you have decolonised, obviously, because you **have no colonial links** anymore, you have a totally insular society, only inward looking and that could be a beautifully equal and fair society but it could just as well be an utterly unfair and cruel society.’*
(Francois)

In Francois’ interpretation of decolonisation, it does not automatically correlate with justice. While South Africa achieved political emancipation in 1994, he felt there has not been much visible change:

*‘I believe South Africa **decolonised** in 1910... I think that we have had 23 years of ANC government and we **have seen very little impact on apartheid**.’* (Francois)

At first glance, Francois' words seem harsh, but beneath it lies a deep concern for material inequity in the country that has not been addressed. For Francois, more emphasis is needed on material and economic justice rather than on (his conceptualisation of) decolonisation:

*'And I am not sure what people are talking about in terms of **decolonising** actually captures what I suppose the term is **social justice**, or something like that, **economic liberation, cultural liberation** and so I am struggling with the idea of decolonising...what it really means.'* (Francois)

The interpretation of social justice as more in line with resource inequalities was also shared by David (MI11M3W).

*'So, the whole background in South Africa is one of inequality and **social injustices** as it were, so we placed the MOOC very clearly in that context of **scarce resources and inequalities**.'* (David)

From this, we can see that the vagueness of decolonisation discourses, and its potential to even perpetuate injustice, steers Francois away from its use. While current decolonial processes place emphasise on cultural-epistemic emancipation, particularly in higher education institutions, economic emancipation and structural change at a societal level has not yet been achieved, and, as Francois and David point out, this impacts the everyday lives of South African citizens, as was discussed in Chapter 5 and 6. However, more emphasis on economic injustice and resource scarcity does not imply less emphasis on cultural-epistemic injustices.

8.3.2 Addressing Material Injustices

A main motivator behind South African MOOC designers supporting MOOCs was that it promoted free access to education. Riyaadh (MS06M4B) highlights how open education can address financial barriers to education, and how that in itself is an achievement:

*'How is Africans marginalised in terms of education? ...They are **marginalised in terms of money**, they are **marginalised in terms of fees** that they have to pay. So, if the open educational resource can give them at least something, then they are not as marginalised...'* (Riyaadh)

In contrast to the sentiments of MOOCs bringing about free access to education, Francois felt there is an overemphasis on educational access, without focusing on the broader systemic material inequity in society such as unequal wealth distributions and poorly resourced townships and rural areas:

*'I have come to the conclusion that **education isn't inherently a force for liberation**. And if everybody has the same level of education then nobody will break out of their position so if suddenly, all of the **people in the townships** in South Africa had a good matric, that would make **no difference at all**.'* (Francois)

His use of the word liberation, in line with the rest of his argument, is assumed here to mean economic liberation, rather than a Freirean (1970) liberation of the mind. Francois then brings this critique to online education initiatives that aim to democratise access to knowledge, arguing that in fact they increase inequality:

*'I don't think that all of the what people call technology and the IT revolution... it basically feeds into **increasing the IT inequality**. Now I think that anything affective that you provide, will be used more by people who already have advantage than it would be by people that are less advantaged. I think that **if you want to do something about social inequality you have to do it absolutely deliberately**.'* (Francois)

This concept of technology exacerbating inequality is well-researched in digital divide literature (Graham et al. 2014; Selwyn 2002; Wade 2002; Warschauer 2003), and the issue of the advantaged being able to better utilise these resources is described by Rohs and Ganz (2015) through the concepts of the Reception and Usage gaps in MOOCs (Section 2.3.1).

Francois' sentiments on online education's inability to address structural inequalities were shared strongly by Loyiso, who critiques the *'roll out [of] an online program which is going to go to the depth of the Western Cape'* to *'reach the people that cannot access Stellenbosch University'*. Highlighting the violent way that *'very poor communities'* that were removed, when the town of Stellenbosch was established, he elaborates:

*'Firstly, where are these people going to get **PC's**, again **maintaining these machines**, again with no **security** where they are. How will they actually maintain and you gonna *copa* [pay for] all of that? So, I think it is fictitious to say that what we are doing is going to get to that target group. Unless we think beyond the actual module and we go into the social aspect of it, which is, getting a buy-in from the **local municipalities** in those areas to say maybe create **an internet cafe**, or the **schools** that you have, after hours, make them **accessible to the community** to come in and whatever. But do you see what I am saying? We are moving away from just this material and IT and laptops, now you are going to the **social phenomena** ... we are now talking politics.'* (Loyiso)

However, not all courses are targeted at the very poor, and Richard (MI01M1W) aptly summarises this, stating his honest reflection on his course:

*'I think there's a difference between making things **technically available** and making them **truly open**. So, I would say that the course isn't truly open to everyone who may be interested in it. But having said that, given that we're clear on targeting perhaps quite a specific market and specific level within government or NGOs ... But it's not truly open in that sense.'* (Richard)

We see in this section that open education helps in the way of overcoming the barriers of fees to accessing education, however without the additional structural changes at a societal level, as similarly highlighted by Warschauer (2003) and Langa et al. (2017), open educational content cannot really reach the people who would most benefit from it. Both Francois and Loyiso highlight the need to go beyond the university and education space and into broader society if we are to address injustices at a structural level and a political level. Richard raised a valuable point that not all courses are targeted at marginalised groups. Defining target groups is discussed further in Section 9.3.4.

8.3.3 Open Access

Despite (usually) being free to access, MOOCs do not automatically align with other principles of open content, such as open licensing (Wiley 2011a). Through the interviews, it was found that MOOC designers needed to approach their universities, who might own the IP rights of its academic staff's material, and the MOOC platform, who might by default own the rights to the content put on its platform, to ensure their work is openly licensed:

*'[W]e've been very careful to check our agreements. [Uni 1] owns **this material not EdX**, and there are course sites where they own your stuff ... so our stuff, we use Creative Commons licenses. **We keep the IP and place no restrictions on how that material can be reused**. So, if an academic wants to create a course using material I shot for this EdX MOOC but he now works for [another university], I can't stop him. We actually have to go out of our way not to do that. You know **because [Uni 1] automatically owns IP**. So, it's about how we work and the ethos of how we create the material and distribute it.'* (Monique)

Hodgkinson Williams and Trotter (2017) highlight that only 5 of South Africa's 25 universities allow lecturers to hold the copyright to their teaching material; the rest is held by the university itself.

Ahmed shares a similar sentiment, where he was not fortunate enough to get the university to waiver their rights over existing teaching material:

'We didn't make it downloadable. That was due to the universities copyright policy ... our restrictive copyright policy has been preventing us from creating open educational resources ... [Course name] had to be a brand-new course written from scratch ... We can't take existing lecturing material and put it onto your platform.'
(Ahmed)

Trotter (2016) highlights that universities holding the copyright is common across other universities in the Global South and North too, and is not unique to South Africa. Thus, in the case of content licensing, it is more likely in the hands of the university to change its practices, although lecturers and MOOC designers who want to create OER can pressurise their universities and appeal to them to take up more open practices. Thus, on the one hand there are resource and infrastructure barriers to accessing MOOCs, and on the other hand there are restrictive policies that limit reuseability that could help the content become more relevant and localised to different groups.

8.3.4 Technological Accessibility

MOOC designers outlined various ways in which they sought to make their MOOCs more technologically accessible. This part of the MOOC design was often guided by the support team members such as the course, curriculum, and digital media designers and managers, as outlined by Priya:

'[Support team member] often in our meetings says, "How would this look on a phone?" So, she's been playing around with that part of it. The accessibility.' (Priya)

Support team members were often the ones cognisant of assuring that designs and layouts would be technologically accessible to as many people as possible.

8.3.4.1 Mobile Compatibility and Downloadability

On Coursera's mobile app, 'you can do pretty much everything on the app apart from peer-review' (Mishqah). Upon reviewing the different mobile applications, Coursera's indeed outshone others with the ability to do complete quizzes offline and have it sync when there was

connection again. EdX also has an app that allows for offline use but cannot sync assignments and *'didn't necessarily work so well'* (Richard).

FutureLearn does not have an app *'Because then an app would imply a smartphone such as android/iOS. What about people that are sitting with a Nokia 3510i that only has WAP access or minimal internet access?'* (Riyaadh). Instead, the app uses *'progressive design or deductive design, in other words, the platform will scale to any device'* (Riyaadh).

To support participants who did not have continuous internet, Zip files of low-resolution videos and transcripts were uploaded by some MOOC designers, if they had the legal rights to do this (Monique, Nnennen, Caroline). Nnennen explained that other groups were *'going to download these materials and work with people in the rural areas.'* Thus, downloadability helps get content to areas where there is no connectivity.

Riyaadh was not able to make content downloadable due to licensing issues, however he also believed *'you need to be online to be able to participate'* as engagement, knowledge exchange and social learning were integral to the course.

Francois highlighted that for certain subjects, a computer was still essential: *'To try and teach people programming who only have access to their phone... you would have to start with that constraint from the beginning'* (Francois).

Here we begin to see how a platform's pedagogical design, the preference and views of the MOOC designers and the type of content being taught, all contribute to how technologically accessible a MOOC may be to marginalised groups.³⁶⁴

8.3.4.2 Videos and Transcripts

The MOOC instructors interviewed endeavoured to keep videos shorter than 10 minutes, upon guidance from support team members (Priya).³⁶⁵ This was also done to accommodate those with low bandwidth or data and those with work or travel commitments that can only *'dipping in'* for a short while (Craig).

All platforms strongly advised the use of transcripts to ensure that the MOOCs could be accessible to more people. Transcripts proved to not only help those with hearing disabilities,

³⁶⁴ These interconnections are unpacked in various sections of Chapter 9.

³⁶⁵ Priya highlighted that this was encouraged by the support team members who were aware of studies (e.g. Guo et al. (2014)) that showed that shorter videos are more engaging.

but also those who struggled with accents foreign to them, or those who had limited data and could not stream the videos.

Mishqah highlighted that transcripts were an integral feature of the course:

*‘And we **produced transcripts** because we know that **video can be problematic**. And we try and make very good-quality transcripts. We know that that’s appreciated because **when we don’t have a transcript, participants tell us very quickly.**’* (Mishqah)

Caroline, who’s research focused on people with disabilities, also mentioned the use of descriptive text which puts text descriptions to diagrams and pictures. She noted, *‘we had several blind participants who commented on the fact that it is very nicely accessible’*.

Thus, shorter videos, low bandwidth options, captions and descriptive texts were used to make the content more easily accessible.

8.3.4.3 Cross-platform Approaches

Ranjeni shared a story of participants requesting a Facebook group:

*‘And one of the participants suggested, **‘Why don’t we open a Facebook site so that we can continue these conversations?’** and so on that basis, I created a Facebook site ... you will see on that Facebook site **you can’t believe how many discussions are happening on that course** and they are actively involved.’* (Ranjeni)

Another interesting case that emerged organically from participants of a MOOC was the formation of WhatsApp groups in local regions. Monique reported that

*‘the people who started them put a notice in the edX forum, “Hi I’m so and so I’m based in Nairobi, does anybody want to meet me on a **WhatsApp group** to talk about our issues?”’* (Monique)

Groups formed in Nairobi, Johannesburg and Accra. She speculated that the shift was because WhatsApp is *‘cheaper’*, more *‘comfortable’*, and less formal than the edX platform. She also described it to be more personable and friendly:

'[W]hat I found interesting about the WhatsApp group stuff are really small things. People greet each other. People don't greet each other on course forums they get straight in. There is a looseness ...there's a different discourse.' (Monique)³⁶⁶

Richard reflected on this stating,

'it made us think about whether WhatsApp groups is an important enough medium that should be embraced and built into that type of platform.' (Richard)

However, MOOC platforms, tend to discourage sharing personal information and communication beyond the platform as articulated by Matthew:

'[b]oth the platforms told us they like everybody to work on their platform ... they don't prevent it ... they give you at least the minimum ways of doing that. So, where people have done the local things, we haven't always known about it.' (Matthew)

The reason for this is likely so that the platforms can collect learning analytics from the big data. From this we again see how MOOC platforms tend to dictate the way in which online learning happens and this can limit designing in a way that best supports marginalised groups.

8.3.5 Reaching Marginalised Groups

Whilst many MOOC designers made a concerted effort to design inclusively, there was much less effort put into actually reaching out to marginalised groups. Advertising was mainly left to be done by the MOOC platform and the university. These MOOC platforms have their own strategies such as advertising on American TV (Evan). Mishqah mentioned big campaigns in India from Coursera and Bradley mentioned directed advertising in Brazil from edX. These advertising efforts show increased numbers of participants from these countries, proving that directed advertising in developing countries makes a difference.³⁶⁷ The precise reason for choosing these big-name platforms was because of their large, existing, global participant pools (Mishqah). Evan highlighted his ignorance in terms of marketing locally:

'I don't think we've done that at all and also I have not marketed a single one of these courses because at the end of the day I've got a full-time job ...and I have got no idea how to market.' (Evan)

³⁶⁶ While these MOOC participants did not follow conventional connectivist approaches to learning, the use of cross-platform approaches and the formation of self-organised learning networks is its own form of community learning. This is expanded upon when discussing pedagogical approaches in Section 9.5.3.

³⁶⁷ Participation numbers from these countries increased despite language barriers and connectivity issues.

In some cases, advertising was done through sharing the course in existing virtual communities of practice, as Francois shares:

*‘They basically hear about it **through the channels of programming so they already in the programming world** so then they hear about it and pursue it.’* (Francois)

This begins to go beyond the spheres of the university and the platform and into a broader audience, however such advertising mechanisms are unlikely to reach marginalised groups. Some MOOC designers, however, did try to market to local audiences.

Radio was used by Riyaadh to explain more about what a MOOC is in the first place:

*‘We had radio interviews and ... we mentioned you can **download transcript, not data intensive, don’t need to watch videos to be able to participate in the course, and you can still engage on any device.**’* (Riyaadh)

Loyiso also used radio and was very specific in the types of radio stations he went to ensure that more marginalised groups and rural areas hear about the MOOCs:

*‘I am not interested in Metro, ... YFM, ... 5FM, SAFM, because this is where the listeners who know what’s going on in the country ...they are very clued up with the issues. Those I will do, but I am going to begin at Umhlobo Wenene, Phalaphala FM, you know all the so called you know **lingua franca radio stations.**’* (Loyiso)³⁶⁸

TV announcements were also mentioned as a way to advertise. Once again, Loyiso mentions being strategic about which stations will reach the audiences that need access to free courses:

*‘I am doing TV. So again **TV**, very important that I emphasise **SABC 1, 2, 3**, before I do the DSTV channels. ANN7, E-TV.’* (Loyiso)³⁶⁹

Participant stories were used by Uni3 as a way for current or past participants to encourage new participants to take on MOOCs. The idea was to show people from all walks of life as MOOC participants so that potential MOOC participants could identify with them:

³⁶⁸ The former radio stations are in English, whereas the latter ones use various local languages and are more regionally focused.

³⁶⁹ The former television channels mentioned are from the South African Broadcasting Corporation (SABC) and are free and local. Digital Satellite Television (DStv) are international channels that one needs to subscribe and pay for.

*'So with the **participants stories on our YouTube** channel where we have been interviewing people with these kinds of stories periodically... **real stories of people** who told us ... what and how they've used it.'* (Mishqah)

Creating in-person learning hubs for participating in the MOOC was another impactful strategy used in some of the MOOCs reviewed:

*'We reached out to **two schools to ask the principal** if there could be a space for **teachers to come together** and will they allow them to download so **we made the MOOCs downloadable.**'* (Nnemme)

This is the most concerted type of effort to reach marginalised groups that would be unlikely to come across MOOCs on their own.

Word of mouth also proved to be one of the most powerful ways to spread news of the MOOC. Richard shares a unique success story through this method:

*'If we look at the total number of students we had registered, it was about 8000 and **3000 of those were from South Africa alone so that's a big proportion from within this country.** And we still haven't yet figured out what was the cause of us getting such a large group within South Africa. It may have been because of our marketing or ... **word of mouth.** Once a certain number of people in South Africa had signed up, word of mouth helped their friends.'* (Richard)

The cited number of South Africans taking up a MOOC is abnormally high and shows that there is indeed massive interest locally if people are aware of such courses.

From the methods above, it can be seen that in order to reach marginalised groups, there is a need to go beyond MOOC advertising done by the platforms themselves, advertising on the internet, or advertising through existing networks. Methods that reached out physically rather than virtually, such as encouraging local learning groups, advertising on local radio and TV stations, and using word of mouth in the right communities, proved most successful in increasing participation of marginalised groups.

8.4 Conclusion

In response to **research sub-question 4**, this chapter aimed to investigate how MOOC designers conceptualise injustices in and through their MOOCs, and how they attempted to address these injustices. Social justice and decolonial discourses influenced and complicated

MOOC designers' conceptualisations of justice and it was necessary to use the Dimensions of Human Injustice Framework to step away from the jargon of these discourses in order to unpack MOOC designers' conceptualisations of injustice and how these conceptualisations impacted the design and implementation of their MOOCs. The framework proved beneficial in seeing where MOOC designers placed emphasis, and where they fell short, in terms of addressing injustices.

For those MOOC designers that saw cultural-epistemic injustices and the dominance of Eurocentric discourses as the main issue, they focused on contextual relevance, plurality of knowledge and recognition of cultural diversity through inclusive practices and processes, as part of their aims. From this perspective, the privileging of marginalised knowledges is considered fair, given the historical atrocities against these worldviews and the need to challenge dominant epistemologies. While there is a need to privilege marginalised knowledges and people, there are, however, concerns (raised by Nnenne and Loyiso) about the risk of overcompensation, such that privileging local and indigenous knowledges i.e. the particular, can lead to an unfair rejection of the global knowledge base, i.e. the universal, and could lead to essentialism, fundamentalism and nationalism (Ndlovu-Gatsheni 2015). On the other hand, to become colour-blind, as Ahmed argued, takes the opposite extreme of ignoring the entanglement between race, gender, class, culture, location, marginalisation and structural inequalities (Grosfoguel 2007). Thus, a balance needs to be struck between approaches.

In addressing cultural-epistemic injustices in MOOCs there are also different stages where dialogical and inclusive processes can be brought in. In the case of Nnenne, a concerted effort was made from the inception of the MOOC to include a plurality of ideas and a diversity of cultures in decision-making processes: *justice-as-process*. She felt that this is when the ethos is formed and the most crucial stage of input. At the level of implementation, challenging dominant discourses can be done by including diverse and pluralistic content, and creating room for interaction and co-creation of knowledge, as in the case of Ahmed. However, as Priya points out, in the global space of MOOCs with complex heterogenous participants, it can be difficult to have content that is relevant to everyone. Thus, emphasis really needs to be made pedagogically to include diverse voices and critical thought from the participants themselves. As both physical and virtual learning spaces become more diverse, *justice-as-pedagogy*, as opposed to *justice-as-content*, serves as a guide to educators in an increasingly global world.

Focusing more on material injustices, Francois argued that the emphasis on relevance in curriculum should not overshadow the need to address material injustices as there is little use in tackling cultural-epistemic injustices within education systems that the marginalised don't have access to. Both Francois and Loyiso emphasised that not only do material injustices need to be addressed first, they also need to be addressed structurally beyond the educational space; at a community, municipal and national level. When MOOC designers sought to address material injustices, for example, through making content open and technology accessible, the MOOC platform, its features, and its limitations, played a big role. Whilst much effort was placed on technological accessibility, there was less focus on consciously reaching out to marginalised groups.

In comparing MOOC designers who focused on cultural-epistemic and geopolitical injustices, to those that focused on material and political injustices, we see a strong need to bring the two approaches together. By only problematising external, colonial, and neocolonial sources of injustices, educators may overlook domestic powers of oppression and material inequalities. Alternatively, those that focus on material and economic injustices, may overlook the power imbalances and dominant epistemologies that dictate the framing and the functioning of societies and global relations. A concerted effort needs to be taken from both angles to address cultural-epistemic injustices as well as the material injustices, bearing in mind both national and international sources of dominance and oppression.

By making MOOC designers aware of the multiple dimensions of injustice that need to be overcome in MOOC design and implementation, they can think through decolonisation and social justice more clearly and develop more holistic mindsets on injustices. This can in turn lead to more multi-pronged efforts to conceptualise, design and implement MOOCs in justice-oriented ways that better support the diversity of learners. The practical attempts of South African MOOC designers to address injustices and the concerns they raise, as highlighted in this chapter, can be seen as a guide and motivation for the MOOC space in general to take greater strides in creating and implementing MOOCs in more justice-oriented ways. As Lambert (2018) highlights, openness in and of itself is not automatically just but needs a concerted focus in order to address injustices. Whilst this chapter focused on individual practices drawn from MOOC designers, Chapter 9 take a more macroscopic view, systemically outlining various approaches to designing justice-oriented MOOCs.

9 Towards designing justice-oriented MOOCs

9.1 Introduction

This chapter draws from previous chapters to respond to the **overarching research question**:

To what extent do or could MOOCs, particularly those produced in South Africa, support the educational needs, preferences, and aspirations of marginalised, peri-urban South African youth and address the material, cultural-epistemic, political, and geopolitical injustices they face?

Chapter 7 and 8 are drawn upon to systematically present factors, decisions and practices that influence the design of justice-oriented MOOCs at various levels. These factors, decisions and practices are then compared with the broad-ranging difficulties and injustices raised by Potential MOOC Participants (PMPs) in Chapters 5 and 6 to respond to the overarching question.

The concept of a justice-oriented MOOC is defined here as a MOOC that seeks to address material, cultural-epistemic and political/geopolitical injustices in itself and in society, based on the Dimensions of Human Injustice framework built in Section 3.6. As argued throughout this thesis, openness does not necessarily equate to justice. Thus, four categories of MOOCs are defined here regarding justice. The first are MOOCs that perpetuate injustices e.g. a MOOC that gives historical narratives which exclude certain histories and viewpoints, whether intentionally or inadvertently. The second are MOOCs that are based on open philosophies but that do not particularly address injustices e.g. a MOOC teaching programming using openly licenced material and software without removing technological barriers to access. The third are MOOCs that strives for justice, but not necessarily through actively including the marginalised in its target group e.g. a MOOC that empowers journalists, activists or NGO workers to strive for their causes, or MOOCs that guide engineers to consider the societal or environmental impacts of their designs.³⁷⁰ The final is a justice-oriented MOOC that strives to include marginalised groups and their knowledges through removing barriers to access and participation e.g. a MOOC that focuses on inclusive education in low-resourced areas.³⁷¹

³⁷⁰ In this category, the justice-oriented element lies more in the purpose of the MOOC.

³⁷¹ In this category, the justice-oriented aspect lies more in the target group of the MOOC. While economic imbalances play a big role in the marginalisation of peoples, other cultural-epistemic and political/geopolitical injustices can also cause one to be marginalised, as was highlighted by Ahmed in Section 8.2.3. Sub-categorisations of marginalisation are discussed in more depth in Section 9.3.4 and 9.4.2.

As none of the MOOCs reviewed perpetuated injustices, the latter three categories are focused on in this chapter. Where necessary, I differentiate between basic open practices, justice-oriented approaches, and justice-oriented approaches for marginalised groups e.g. the PMPs. As justice is complex and multifaceted (outlined in Chapter 3, 6 and 8), the word ‘oriented’ implies the process of striving *towards* something rather than an end goal or binary state (Sen 2009); MOOCs may address some injustices but not others. This chapter is not an exhaustive list of every factor, but rather the pertinent points that arose from the data. Where possible, these are connected to literature.³⁷²

This chapter poses three arguments. The first argument is that there is no one-size-fits-all framework to creating justice-oriented MOOCs. Rather, it is crucial to unpack the purpose of the MOOC, the target group, and the MOOC’s philosophical underpinnings, as these factors will guide *different approaches* to justice-oriented MOOCs. Thus, instead of highlighting a definitive framework, this chapter outlines possible pathways in MOOC design which can enable a MOOC to be more justice-oriented.

The second argument is that MOOC designers need to examine their subjectivities and how these shape the epistemological framings of the MOOC *from its conceptualisation*. Drawing on findings from Chapter 7 that illustrated the importance of epistemic diversity in MOOC designers, this chapter emphasises a human-centred approach i.e. to place emphasis on people and their contexts – both the designers and the participants – which can often be underemphasised in MOOCs (Ross et al. 2014). It is argued that MOOCs are designed *from* certain contexts and *for* certain contexts and these contexts need to be made explicit.

Following this, the third argument is that greater emphasis is needed on factors *outside* the construction of the MOOC curriculum, i.e. factors beyond content, outcomes, assessments, processes, pedagogy and even praxis.³⁷³ In reviewing MOOC design literature in Section 2.4.6, there was a tendency to focus on what happens *in* the MOOC, without explicitly emphasising the social, political, environmental and technological contexts *surrounding* the MOOC *as an*

³⁷² In some places, crucial points highlighted in literature are also included if interviewees did not mention it.

³⁷³ Smith (1996) outlines four approaches to curriculum theory and practice: curriculum as content transmission, curriculum as outcomes to be achieved, curriculum as process, and curriculum as praxis. In all these approaches, criticism is that not enough emphasis is placed on the contexts of the learners. This is because curriculum is centred around what happens *in* classrooms (ibid.). By extension, MOOC curriculums focus on what happens *in* the virtual learning environment.

explicit and conscious step in the design process.³⁷⁴ MOOCs need to be designed for the contexts they are to be situated in.

Following Crosslin (2016:85), who argues that ‘MOOC designers need to consider several largely ignored factors before they begin designing a course’ such as ‘epistemologies, methodologies, communication goals, and power relations’, this chapter makes these, and other factors explicit through outlining justice-oriented approaches to MOOC design. These approaches are outlined through four decision-making spheres highlighted in Figure 9-1. The first sphere, outlined in Section 9.2, deals with the framing of MOOC production, highlighting the high-level decisions that are made at an institutional level. The second sphere, outlined in Section 9.3, involves the conceptualisation of the MOOC where the MOOC designers unpack the philosophical underpinnings, purpose, and envisioned target group. The third sphere, outlined in Section 9.4, involves situating the MOOC. This is where decisions are made that are external to the construction of the MOOC itself, relating to the contexts in which the MOOC will be placed. The last sphere, outlined in Section 9.5, is the actual construction of the MOOC, where power dynamics, pedagogical approaches, participation, content and assessment methods are brought together.³⁷⁵ The spheres outlined are not necessarily chronological, but rather represent different nested layers of decision-making. Each section highlights factors, decisions and practices of MOOC designers and management that impact the elements of MOOC design in that sphere. Sections 9.3, 9.4, and 9.5 each end with the design choices that would suit the marginalised, peri-urban South African youth (the PMPs), directly responding to the overarching research question of this thesis.

³⁷⁴ In Section 2.4.6, three papers were mentioned that were particularly useful in highlighting the contextual factors in which MOOCs are *situated*: Abidi et al.’s (2017) roadmap to creating MOOCs in LMICs, Lackner et al.’s (2014) checklist for designing and implementing MOOCs, and Bali’s (2014) gleaning of good practices in MOOC design. Practices from these papers are drawn upon where applicable.

³⁷⁵ ‘Situating the MOOC’ and ‘Constructing the MOOC’ are intertwined, but the distinction is made here because elements in ‘Situating the MOOC’ are often hidden or invisible, and the purpose is to make them explicit in the design process.

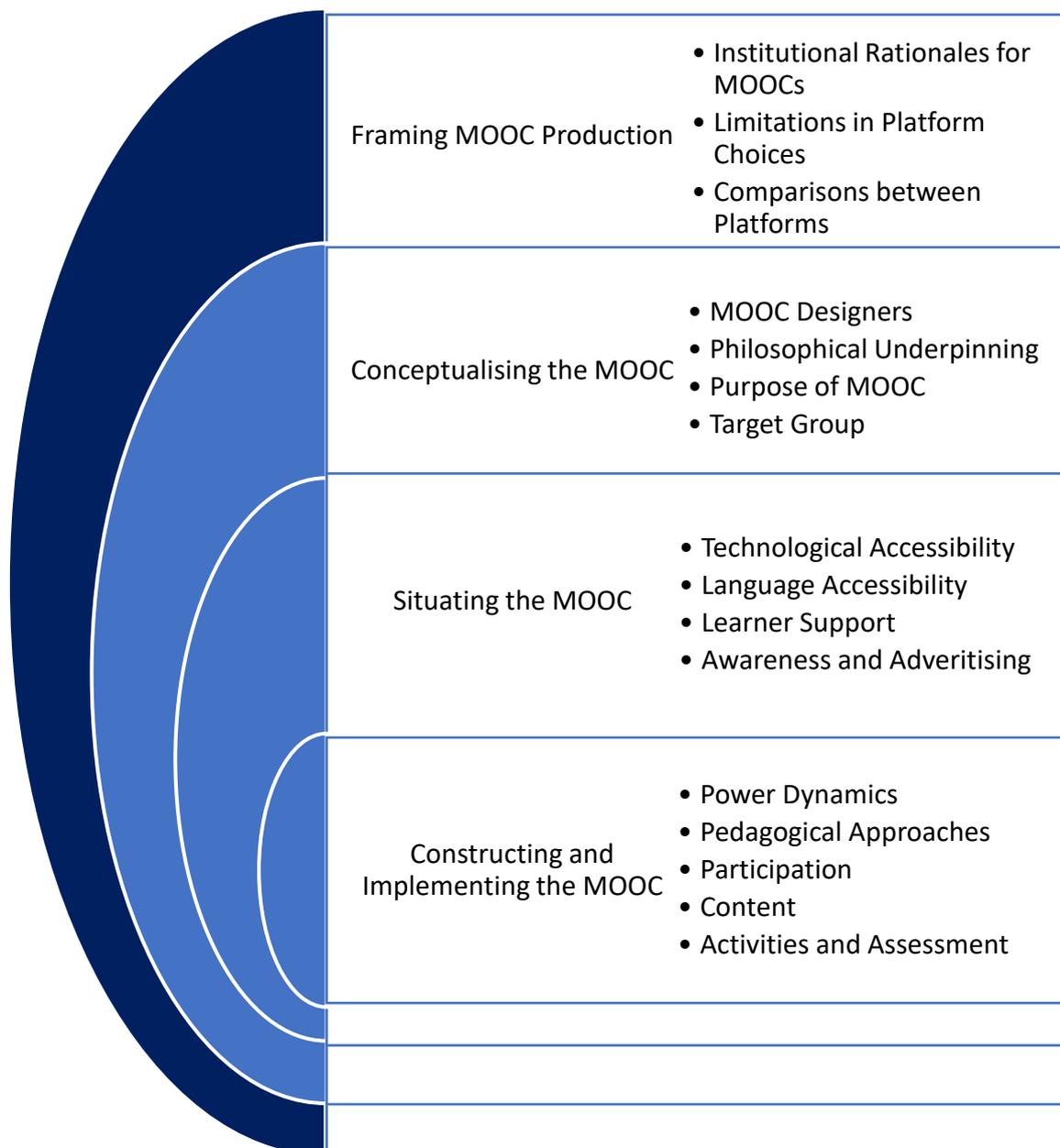


Figure 9-1 Decision-making spheres in designing justice-oriented MOOCs

Source: Author's own

9.2 Framing MOOC Production

Before a MOOC can be conceptualised, there are a plethora of factors that guide and limit the possible variations of a MOOC, and thus their ability to be justice-oriented. This section deals with these factors, which are often beyond the control of a MOOC designer who is further downstream. These decisions are made at an institutional level and include institutional rationales for investing in MOOCs, and institutional platform choices (or limitations).

9.2.1 Institutional Rationales for MOOCs

Through my interviews with MOOC designers, it was possible to gather various institutional rationales for investing in MOOCs or not. Uni1, Uni3 and Uni4 gave a variety of similar reasons for investing in MOOCs. These related to improving their university's reputation, branding and image through marketing it on an international platform alongside other prestigious universities and showcasing niche research, particularly research relating to Africa (Ahmed; Monique; Matthew). Beyond reputation and branding, there was also a strategic objective to begin building capacity in online education, given that learning and teaching is increasingly incorporating more online elements (Monique; Mishqah; Riyaadh).

Uni2 did not join any of the major MOOC platforms, however, it had massive student-facing online courses that arguably reached more marginalised youth from South Africa than the MOOCs on major platforms, thus it was included in the study. Furthermore, Anna (MS01F2W) mentioned that *'the idea is to open them eventually for the public'*. She explains the reasoning as to why the university chose not to do MOOCs, also alluding to the rationale for MOOC being branding related:

*'Ok so [Uni2] decided that ... we do not need MOOCs for public relations. We have other things. ...it was a very conscious decision not to have MOOCs because a MOOC is costing a lot ...and that's what our management decided. **The return on investment of making MOOCs is not worth it.**'* (Anna)

This resonates with Ahmed's concern that Uni4's Vice Chancellor was interested in *'how can we make money out of this MOOC?'*

Table 9-1 summarises institutional rationales for MOOCs gathered through the interviews and research.³⁷⁶

³⁷⁶ This was compiled from interviews with Anna (MS01F2W), Anthony (MI16M2W), Ahmed (MI10M4B), Riyaadh (MS06M4B), Mishqah (MS05F3B), Monique (MS03F1W) and Matthew (MS04M3W) as well as from the UCTMOOCs (2019) website. A ✖ indicates that an interviewee explicitly stated that the rationale is *not* part of the universities plan. A question mark indicates uncertainty as it was not mentioned in the interviews but could be part of the university's rationale.

Table 9-1 Institutional rationales for MOOCs

Institutional Rationale for MOOCs	University			
	1	2	3	4
To improve the university's reputation and branding	✓	✓	✓	✓
To showcase niche and unique research projects	✓	✓	✓	✓
To showcase African knowledges, scholarship, research and teaching practices	✓	✓	✓	✓
To build expertise, capacity and networks in online learning as more formal courses and degrees are becoming online	✓	✓	✓	✓
To join the global MOOC movement and find out more about it	✓	✗	✓	✓
To showcase the university's teaching and research excellence and make it globally accessible	✓	✗	✓	✓
To support students transitioning into university	✓	✗	✓	?
To support students transitioning into postgraduate studies	✓	✗	✓	✗
To investigate how online education could be monetised	✗	✗	✗	✓
To support people outside the university who don't have access to higher educational support, teaching and learning	?	✗	✓	?

Source: Author's own

Of the four universities, Uni3 was the only university to explicitly mention, from an institutional perspective, that the goal was to serve those who did not have access to higher education (Matthew, MS04M3W). Thus, besides Uni3,³⁷⁷ democratising access to education through MOOCs is not at the fore-front of universities rationales for investing in MOOCs. As will be shown in later sections, these institutional rationales impact the flexibility with which MOOC designers can design justice-oriented MOOCs.

9.2.2 Limitations in Platform Choices

MOOC platform choices were made by the university, and in some cases informed by the university's centre for teaching and learning. Uni1, Uni3 and Uni4 wanted to go with the major platforms (i.e. FutureLearn, Coursera and EdX) because of the large pre-existing student pool and the existing infrastructure (e.g. servers) on these platforms.³⁷⁸ This allowed for the least investment at this exploratory phase in online learning, while being able to market themselves

³⁷⁷ Uni3 was the only university with a rationale to support those who don't have access to higher educational support, and it is resultantly the only university that has MOOCs that explicitly attempt to reach marginalised groups.

³⁷⁸ These reasons were given by Riyaadh (Uni4), Mishqah (Uni3), and Monique (Uni1). Uni2, who decided against using the major MOOC platforms, decided to focus on making student-facing 'mini-MOOCs' on Blackboard (Anna).

globally (Riyaadh). If they had, for example, created their own platform on Open edX, Canvas or Sakai, they would have had to invest considerably in infrastructure and expertise, as well as have to build a community of learners from scratch.³⁷⁹ The choice of platform is a fixed decision that ties the university into a particular pedagogical approach to online learning as well as a particular set of features and functionalities.

Before any ideological choices could be made in terms of which of the three platform to choose,³⁸⁰ practical limitations from platforms informed the decisions made by some universities. Riyaadh, from Uni 4, states:

'We approached three platforms, the big three: your Coursera, edX and FutureLearn. Coursera just simply didn't get back to us ... We also approached edX and they were willing to work with us but the joining fees as well as the maintenance fees were far over the budget of the project. Our other option was FutureLearn, and FutureLearn - they initially didn't want us on board because we didn't fall within the top 200 universities in the world, and we had to come on board as a centre of excellence and as a centre of excellence you need to demonstrate that you have research outputs, academics that are world class essentially, which is why we approached the professor here because he has such research credentials that would allow us to present on FutureLearn. And then we came on board as a centre of excellence but because of the overwhelming positives reviews and they have seen basically what we can do, we have been upgraded to a full partner.' (Riyaadh)

Uni3, who is rated amongst the top 200 universities in the world, did not face such barriers to accessing MOOC platforms and in fact *'the institution was approached from the various platforms including FutureLearn and Coursera'*, and it decided to go with both (Mishqah).

Uni1 had university funding to pay for edX's partnering fees,³⁸¹ and *'was the first African university to join edX'* (Monique). In addition to the partnering fees, there were further conditions. The agreed terms were that edX initially takes all the profit from the certificates

³⁷⁹ These alternative platforms were mentioned by Matthew, Mishqah, and Monique. One of the differences between OpenEdX, Canvas, Sakai, and Blackboard, in comparison to FutureLearn, edX and Coursera, is that the latter three are cloud-based which means that no storage is needed. The former function more as Learning Management Systems than MOOC platforms, which may appear similar but are intended for different scales and uses.

³⁸⁰ For example, Mishqah outlines in Section 7.3.1 that some might want to choose edX for ideological reasons as it has made its software open-source.

³⁸¹ Note that Coursera and FutureLearn do not have partnering fees.

until a certain threshold.³⁸² Thereafter, the profit is shared between edX and Uni1.³⁸³ Thus, edX gains on both ends; the university and the student. EdX, however, is steadier as it is a consortium of universities³⁸⁴ and not a business model like Coursera, who *'keep changing what they're doing'* (Mishqah).

Lower ranked universities are thus constrained in their freedom to choose which MOOC platform they prefer and additionally need to agree to certain conditions in order to join these platforms. Thus, at the MOOC production level, inequalities in access to MOOC platforms can be seen.

9.2.3 Comparisons between Platforms

This section shows the differences in MOOC platforms and how they guide and limit MOOC design, and thus the ability to design justice-oriented MOOCs. As alluded to by Riyaadh in Section 8.2.3, platforms have certain pedagogical underpinnings. MOOC designers from Uni3 tended to be more aware of the pedagogical differences between the FutureLearn and Coursera as they used both. Matthew describes FutureLearn as *'a very social learning-centric thing'*³⁸⁵ and Coursera as *'very kind of constructivist with a very assessment driven thing'*. Between Coursera and FutureLearn, Ranjeni (MI08F3B) found FutureLearn to be *'friendlier'* and *'organised'*, describing that *'the approachability was much nicer'*, whereas *'Coursera was very structured, it had a very formal kind of sense to it'*. Coursera is consciously not focused on discussions: *'basically, [they] told us in the documentation that they do not see the course hanging on discussions'* (Matthew). As an example of how the platform enforces a particular way of designing a course, Francois (MI05M3W) expressed that assessment was sometimes overemphasised: *'The Coursera people were really the ones pushing for the amount of testing ... they basically were saying to us we don't really have enough'*. EdX was described by Mishqah as having *'a strong engineering focus'* with a more instructivist approach.

³⁸² Monique could not mention an amount, but a similar scenario was mentioned by Francois (Uni3) with his course on Coursera. As he outlined, the first \$10,000 from certificate sales goes to Coursera. The university does not gain anything until after that.

³⁸³ Monique highlighted that the contract was for three years and they were obliged to create three MOOCs within the first eighteen months. The revenue was made from certificate sales of which they chose the lowest price possible: \$49. This profit is taken by edX until a certain threshold is reached. Thereafter, the profit is shared. The percentage that Uni1 gets depends on various factors such as the number of reruns.

³⁸⁴ EdX is a non-profit organisation without any venture capital or any other funders.

³⁸⁵ Matthew mentioned that Futurelearn is trying to add more assessment to its model. A downside of FutureLearn might be an overemphasis on social learning, bearing in mind that some participants prefer to learn in different ways, perhaps through less engagement and more measured learning outcomes.

Platform features are also important to consider when choosing a platform. Coursera’s *peer assessment* was considered *clever* and *really tested* where as other platform’s peer assessment were *amateurish in comparison* (Matthew). FutureLearn referred to a similar feature as *peer review* where *there is no mark* (Matthew). Monique outlined that edX’s peer assessment had a *major problem* with it regarding the way in which it exchanged assignments as they were submitted.³⁸⁶

The MOOC designers’ impressions and understandings of the three MOOC platforms highlighted above, as well as the technological accessibility features highlighted in Section 8.3.4, are summarised in Table 9-2. This was also supplemented by my own review of the platforms.³⁸⁷

Table 9-2 Analysis of 3 MOOC platforms reviewed

	FutureLearn	Coursera	edX
Pedagogical leaning	Social constructivist	Constructivist	Instructivist (shifting to constructivist)
Niche	Social learning	Skills and competencies	Expert content and skills
Disciplinary alignment	Social Sciences, Arts and Humanities e.g. education or philosophy	Social Sciences and Hard Sciences e.g. politics or chemistry	Hard Sciences e.g. science, engineering or programming courses
Structure	Easy and friendly	Structured and formal	Structured and formal
Discussion Forums	Primary source of learning	Supplementary	Supplementary
Peer evaluation	Peer review (no grading)	Peer assessment (grading necessary) Intelligent peer-assessment algorithm	Peer assessment (grading necessary) Glitchy algorithm
Offline	Downloadable (recent change)	Downloadable	Downloadable
Mobile App	None	Excellent app that saves videos offline and allows for questions to be done offline and synced	Good App but not without its glitches
Activities	Mainly discussion board and simple MCQs	Activities such as drag-and-drop exercises, matching, MCQs, quizzes, often involving critical thinking	Activities such as drag-and-drop exercises, matching, MCQs, quizzes etc. with innovative interactive graphics and creative exercises

³⁸⁶ Monique explained that this resulted in early *‘good students’* marking each other while slower, weaker students got poorer feedback.

³⁸⁷ This was done to the extent that it was possible from a participant’s perspective.

Assessment	Little to none	Important	Important
Course access	Participant profile expires after a few weeks after course finishes weeks unless one upgrades	Always accessible	Always accessible
Openness	<ul style="list-style-type: none"> - No prerequisites - A variety of free access courses available - User account needed - Content licensing depends on institution's regulations 	<ul style="list-style-type: none"> - No prerequisites - A variety of free access courses available - User account needed - Content licensing depends on institution's regulations 	<ul style="list-style-type: none"> - No prerequisites - A variety of free access courses available - User account needed - Open-source platform -Content licensing depends on institution's regulations
Partnering Fees	None, ability to join based on university ranking	None, ability to join based on university ranking	Yes
Certification	<p>Certificate of Participation purchasable</p> <p>Financial aid offered but not advertised widely</p>	<p>Certificate of Completion purchasable (if the pass mark was achieved)</p> <p>Financial aid clearly stated</p>	<p>Certificate of Completion purchasable (if the pass mark was achieved)</p> <p>Financial aid offered but not advertised widely</p>
Accredited Courses	Offers paid courses for micro-credentials, academic accreditation, professional accreditation and full online degrees	Offers paid courses for professional certificates, MasterTrack certificates and online degrees	Offers paid courses for professional certificates, MicroMasters program, and online degrees

Source: Author's own

The pedagogical leanings of MOOC platforms, their features for interaction and assessment, and their ability to be mobile compatible or available offline all impact the ability to design justice-oriented MOOCs for different purposes and target groups. This will be unpacked in subsequent sections.

9.3 Conceptualising the MOOC

This sphere deals with the conceptualisation of the MOOC i.e. when the philosophical underpinnings, purpose, and target group are decided by the MOOC designers. While it is always possible to iteratively modify these in later stages, the intentions made earlier on tend to set the trajectory of the MOOC.

9.3.1 MOOC Designers

While the institutional rationales of the MOOCs are often defined, MOOC designers³⁸⁸ have a big influence in subsequent decision-making. Drawing on Chapter 7, it was shown that the MOOC designers' identities strongly influenced the MOOC at all stages in design; it influenced the ethos and purpose of MOOCs, the target groups, the pedagogy and participatory methods, and the measures taken to make the MOOC open and inclusive. The chapter argued that epistemic diversity of MOOC designers and their gaining of a critical consciousness, broaden ways of understanding and enacting openness. It is further asserted here that *epistemic diversity of MOOC designers, and their developing of a critical consciousnesses, are key factors to designing justice-oriented MOOCs* as they serve to challenge cultural-epistemic injustices.

Epistemic diversity of MOOC designers can be achieved through following the practices of Nnenne in Section 8.2.3. Nnenne and her colleagues consciously sought to include different ways-of-being and ways-of-knowing in the MOOC design team to ensure that multiple voices were included in the MOOC-making process.³⁸⁹ The more epistemically diverse the people who are at the decision-making table, the more inclusive the MOOC will be, as they are the ones who set the ethos of the MOOC. Her efforts to include multiple voices *from conceptualisation phase* of the MOOC differed from others who emphasised this in the implementation stage.

Another practice which served to include diversity and breadth of expertise was seeking equitable partnerships.³⁹⁰ This was highlighted by Mishqah, who described a MOOC co-created by the university and a local NGO. Partnerships can be within departments in the university, with other universities, government organisations, local or international NGOs, research or policy centres, or corporates.³⁹¹ Partnerships with organisations working in the field can allow for voices beyond the academic space to be included in the MOOC, steering it to be more relevant, practical and grounded. Having more partners also allows for the MOOC to reach out to broader audiences and reach specific target groups.

³⁸⁸ A reminder here that MOOC designer refers to instructors, curriculum designers, instructional designers, project leads and managers etc. They all play a role in conceptualising the MOOC.

³⁸⁹ They included differently abled people, different ages, genders, races and cultures (Section 8.2.3).

³⁹⁰ The downside of partnerships may be political agendas, bureaucratic processes, or aims and objectives that may not align with the original vision of the MOOC, however none of these arose in conversation with the MOOC designers.

³⁹¹ Often, partners bring in additional funding which is an added benefit.

In terms of gaining a critical consciousness and being critical reflexive, the examples of Anna, Chris, Anthony and Caroline in Sections 7.2.3, 7.2.3, and 7.3.1 can be drawn upon. This *process* of reflecting on one's subjectivities, as well as what perspectives may be lacking in the MOOC, assists in striving for justice-oriented MOOCs. Epistemic diversity in the MOOC team helps each member to examine their own preconceived notions. Gaps in perspectives could be filled through inviting collaborators such as experts, practitioners, teaching assistants or students to partake in the MOOC formulation. They could also be brought on as co-presenters or interviewees in the MOOC to represent diverse experiences (Richard).

Similar points were raised by Abidi et al. (2017:501) who emphasised screening the course by a 'diverse group' of 'discipline experts, computer and information technologists, and experts from disciplines other than that in which the MOOC was offered'. They also emphasised that it was useful to 'include at least one student in the team of evaluators' as their critical perspective would be invaluable (ibid.).

9.3.2 Philosophical Underpinnings

Leading on from epistemic diversity and critical consciousness, MOOC designers need to examine and make explicit their philosophical underpinnings, underlying assumptions and preconceived notions, as this frames the MOOC. This was highlighted by Nnenne, in Section 8.2.3, who was most vocal about making '*the ethos of the MOOC*' explicit. Philosophical underpinnings include the ontological and epistemological approaches as well as any ideologies, viewpoints and theories that are taken.

In addition, there are often agendas or 'hidden curriculum' tied into courses and this needs to be made explicit too (Giroux and Penna 1979). Agendas need not be seen as bad, but rather a motive or standpoint (Smith 1996). While the purpose is more explicit, agendas are normally in the backdrop. For example, Caroline wishes to challenge people who '*think that disabled children need to go to special schools*', arguing instead for inclusive education that accommodates them.

Similarly, it is important to make explicit the school of thought from which one speaks. In many disciplines, there are many sub-divisions that are in disagreement with each other or have

different fundamental assumptions.³⁹² To the novice, if only one viewpoint is presented without acknowledgement that other viewpoints exist, they will take what they learn as the whole truth.

MOOC designers also need to examine their epistemological assumptions on knowledge and learning which inform the MOOCs' power structures and pedagogies e.g. an objectivist standpoint that would lead to a more instructivist pedagogy, or a subjectivist standpoint that would lead to a more constructivist or social constructivist approaches (Crosslin 2016). A pragmatic decision could also be taken whereby a designer simply goes with the approach they are familiar with or the one that best achieves the MOOC's purpose. These power dynamics and pedagogical approaches are unpacked in Section 9.5.

Drawing on the above, in order to position the MOOC amongst the plethora of ideologies, philosophies and approaches, and challenge any cultural-epistemic injustices it may perpetuate, it is crucial to make the ethos of the MOOC explicit. The following questions are useful in developing the ethos of a MOOC.

- What are the underlying philosophical assumptions of the MOOC designers and by extension, the MOOC?
- What agendas are being promoted or countered i.e. what does the MOOC stand up for, or stand up against?
- What school(s) of thought is the MOOC speaking from, to, or against?
- What epistemological assumptions does one have on how knowledge is formed/transmitted and how learning happens?

9.3.3 Purpose of a MOOC

9.3.3.1 *Categorising MOOC purposes*

Czerniewicz et al. (2014) highlight five purpose-focused categorisations of MOOCs which are useful here to discuss justice-oriented purposes of MOOCs. Table 9-3 displays these in addition

³⁹² For example, in philosophy you have the analytical philosophers and continental philosophers. In psychology you have those who align with embodied cognition and those who align with Cartesian dualism.

to adding further sub-categories that emerged from the data.³⁹³ ³⁹⁴ The sub-category of vocational skills³⁹⁵ is unique in that it was informed from the PMPs.³⁹⁶

³⁹³ These examples of MOOCs extend beyond the MOOCs that were reviewed in this study.

³⁹⁴ Advocacy MOOCs could have also been its own category, as Czerniewicz et al. (2014) highlight, however it was included under workplace skills as they are usually targeted at a specific profession, e.g. journalists or policy-makers.

³⁹⁵ Vocational skills here refer to technical skills needed for occupation that can be obtained from a Technical and Vocational (T-VET) college rather than a university.

³⁹⁶ The Alison platform was more tailored to vocational MOOCs and was thus drawn upon there. No clear examples of vocational MOOCs were found from South African MOOCs on Coursera, edX or FutureLearn.

Table 9-3 Purpose-focused categorisation and sub-categorisation of MOOCs

Category	Sub-category	Examples
Teaching showcase These courses showcase the institutions expertise in teaching. It could showcase well-known professors, unique teaching methods, or unique skills. These tend to be locally and globally focused.	'Celebrity' Instructor	'What is a mind?' (UCT, FutureLearn)
	Teaching method/approach	'Education for All: Disability, Diversity and Inclusion' (UCT, FutureLearn)
	Technical Skills	'Julia Scientific Programming' (UCT, Coursera)
Gateway skills These courses guide prospective undergraduate students, making them aware of the expectations and opportunities available as well as assisting them in developing the skills they will need at university. These tend to be locally focused.	High school/working to university transition	'What do Architects and Urban Planners do?' (Wits, edX)
	Supporting current university students	'Writing your World: Finding yourself in the academic space' (UCT, Coursera)
Graduate literacies These courses support postgraduate student in general research skills and methods, as subject-specific needs. These tend to be locally and globally focused.	Writing Support	'Postgraduate Academic Literacy for Management and Business Students' (Wits, edX)
	Research and Subject-specific skills Support	'Research Methods: An Engineering Approach' (Wits, edX)
Workplace skills These courses support those already working in industry (i.e. life-long learning for professionals, business people or advocacy workers) or looking to gain vocational skills. The courses apply relevant knowledge and skills to real-world applications. These courses may help showcase the institutes professional programmes or programmes that address societal concerns. As a result, they tend to be more locally focused.	Professional Development	'Results-Based Project Management: Monitoring and Evaluation' (Wits, edX)
	Business or Soft Skills	'Becoming a changemaker: Introduction to Social Innovation' (UCT, Coursera)
	Advocacy	'Activism and Citizen Journalism through Media' (Wits, edX) 'Forced and Precarious Labor in the Global Economy: Slavery by Another Name?' (Wits, edX)
	Vocational Skills	'Web Design' 'Workplace Health and Safety' (Alison)
Research showcase These courses showcase the universities cutting-edge research. Courses demonstrate novel, innovative research or unique approaches. These courses tend to be more in-depth and assume some prior knowledge. As a niche approach, specialisation in local contexts/issues is often a feature of these courses.	Thematic showcase	'Climate Change Mitigation in Developing countries' (UCT, Coursera) 'African Insights' (UJ, Blackboard)
	Interdisciplinary showcase	'Medicine and the Arts' (UCT, FutureLearn) 'System Dynamics for Health Sciences' (Wits, edX)
	Local knowledge showcase	'Teaching for Change: An African Philosophical Approach' (Stellenbosch, FutureLearn)

Source: Adapted from Czerniewicz et al. (2014) with my additions highlighted in red. Examples are my own.

These categories³⁹⁷ and sub-categories are not exhaustive nor mutually exclusive and will indeed grow over time. The categories reflect the current MOOC landscape in South Africa but may bare resemblance in other regions. Drawing on Table 9-3, justice-oriented MOOCs can emerge from any purpose-focused categorisation of MOOCs. Justice-oriented MOOCs *for marginalised groups*, however, may need the purpose to align with the needs of the marginalised group in question. For example, a MOOC focused on teaching doctors' specific skills needed to improve their practices may be justice-oriented but not be applicable or useful to a marginalised group where barely anyone has a tertiary education.³⁹⁸

9.3.3.2 *Justice-oriented MOOC purposes*

An important leverage point to creating justice-oriented MOOCs, that emerged from interviews and reviewing of MOOCs, is that *MOOCs respond faster to hot topics, environmental concerns and current affairs than traditional courses*. This is likely due to the flexibility and experimental nature of MOOCs. For example, the '*Climate Adaptation in Africa*' MOOC was launched following increasingly severe droughts in South Africa. Other examples include the '*African Thinkers*' course and '*Teaching for Change*' MOOC that were created in response to student calls for decolonising education. Through leveraging on the ability to respond to current issues faster, MOOCs can pursue justice-oriented purposes.

Various MOOCs reviewed seemed to be used as a *testbed for new ways of thinking about and approaching topics*, which tended to be justice-oriented. The sub-category of interdisciplinary MOOCs does precisely this, bringing together perspectives from different disciplines such as the '*Medicine and the Arts*' MOOC. The bringing together of disciplines creates opportunity for knowledge exchange and expanding of both the designers' and participants' worldviews. MOOCs thus push forward in interdisciplinarity approaches, where formal courses are often held back by bureaucratic processes, paving the way for new, broadened, ways of thinking to emerge. Importantly, these niche and trendy topics also align with the universities' rationales for MOOCs at the same time being justice-oriented.³⁹⁹

Another finding that emerged from the interviews was that *the purpose of the MOOC was often inextricably tied to people*, whether it was those who presented or were interviewed in the MOOC, or the target group of the MOOC. For Ranjeni, whose MOOC would mainly be

³⁹⁷ My category definitions differ slightly from those of Czerniewicz et al. (2014).

³⁹⁸ Similarly, MOOCs that target activists, journalists, engineers, lawyers, NGO workers, or policy makers can be considered justice-oriented *if* the purpose is to address material, cultural-epistemic and/or political injustices.

³⁹⁹ In this chapter, I outline when justice-oriented aspects align with the universities' rationales. This is because a pragmatic approach is taken in that these are real constraints that need to be worked within.

categorised as a research showcase, her MOOC was *‘designed as a public communication of science’* to engage the *‘broad lay audience’*. The purpose was not only to showcase the field of study, but *‘to showcase the people’* in her field of study. Her quotes in Section 7.2.1 show her attempts to showcase differing races, genders, ages, and levels of expertise to break stereotypes of who a scientist might be. For Loyiso, whose MOOC would be categorised as a research showcase of local knowledge and expertise, the purpose was tightly linked to *‘get[ting] as many of the thinkers, the writers, the poets, the artists which mainstream Western discourse has never taught us in our curriculum.’* For Nnenne, the purpose of the MOOC was not about specific content, but *‘build[ing] a community of practice’* as she *‘wanted to get the story of the teachers out, who were doing so much with the little they had.’* In particular, she wanted to *‘get out practices from The South to engage with educators in The South.’* For Richard, whose MOOC was more policy-focused, his purpose was to support *‘people who are senior members of government’, ‘members of parliament’* and *‘NGOs’* to *‘try to increasingly use evidence from research evaluations in their decision-making for policies’*.⁴⁰⁰ Thus, the target group and purpose of the MOOC often need to be decided upon together.

9.3.4 Target Group

9.3.4.1 Categorising target groups

Table 9-4 categorises the types of target groups that MOOC designers mentioned in interviews or on MOOC landing pages as well as the types of groups ascertained from the PMPs survey responses.⁴⁰¹

Table 9-4 Categories of target groups

Group	Description	Examples
Marginalised groups	These groups experience or have experienced marginalisation in one or more ways. Due to this, they are less likely to have accessed higher education and likely live in lower-resourced contexts.	<ul style="list-style-type: none"> • People from LMICs • People from rural areas • People from marginalised ethnicities, genders or races • People in warzones or disaster-struck areas • People marginalised through socio-economic inequality, in poorer and wealthier countries

⁴⁰⁰ Richard’s target group of was one such MOOC that didn’t claim to be targeted to the marginalised yet strove to address injustices in society.

⁴⁰¹ Categories are put together from the South African MOOC landscape but may bare resemblance in other regions.

Prospective undergraduate students	Prospective undergraduates are those interested in pursuing higher education and looking for a taster of what this might be like. They are less likely to understand sub-disciplines and specialisations.	<ul style="list-style-type: none"> • Fresh high school graduates transitioning into undergraduate studies • Working persons transitioning into undergraduate studies
Prospective graduate students	Prospective graduates have experienced university life and wish to return. They have more likely identified a niche topic or interest that they want to explore further, either through researching it or gaining professional expertise in it.	<ul style="list-style-type: none"> • Undergraduates transitioning into postgraduate studies • Professionals transitioning to postgraduate studies
Current students and academics	Current students are already in formal education and may be from the university providing the MOOC. Current students are likely to share similar educational contexts through being in the same discipline, university or university course.	<ul style="list-style-type: none"> • Students on a particular course at a particular university • All university students at a particular university • Students of a particular discipline from any university
Professionals	Professionals are interested in life-long learning to improve themselves or their knowledge on a subject related to their work. They are likely to be more interested in knowledge and skills that can be applied in the in the real-world.	<ul style="list-style-type: none"> • People working in advocacy and politics e.g. NGOs, journalists, activists, and policymakers • People working in technical fields e.g. engineers, doctors or computer scientists • People working in humanitarian fields e.g. educators or social workers • People working in business e.g. entrepreneurs or accountants
Work-seekers	Work-seekers those who have not yet established a career or career path and do not necessarily want a university education but rather vocational skills, short courses, or diplomas that could aid them in finding employment as soon as possible.	<ul style="list-style-type: none"> • People seeking computer skills e.g. web or graphic design • People seeking human resource skills e.g. administration • People seeking hands-on skills e.g. masonry or carpentry • People seeking soft skills e.g. communication or negotiation skills
Knowledge-Seekers	Seekers are those interested in pursuing knowledge for its own sake or to implement it in their personal lives. They may or may not already have higher education but are not particularly focused on advancing in formal education and/or career, at least not in the topic of the MOOC. It could be a hobby or side interest. This group is ambiguous and diverse.	<ul style="list-style-type: none"> • People who are interested in disciplinary topics for personal interest e.g. science, religion, philosophy or history • People who are interested in self-development e.g. wellbeing or nutrition

Source: Author's own

These groups are not mutually exclusive. For example, one could be a teacher (professional) in rural areas (marginalised), or an engineer (professional) interested in pursuing a master’s degree (prospective student). The work-seekers category was formed from PMP responses to their educational needs.

The categories in Table 9-4 focuses on the learning levels and aims of the participants, and not necessarily the contexts they come from or bring with them into the learning environment.⁴⁰² In the last four chapters, PMPs and MOOC designers mentioned a range of contextual and personal factors that could occur in any of the target group categories. This is tabulated in Table 9-5:⁴⁰³

Table 9-5 Personal and contextual factors of MOOC participants

Personal and contextual factors	Section
Differing family responsibilities	7.2.1
Differing financial responsibilities	5.3.1 & 5.3.3
Differing ages, genders and sexualities	7.2.1 & 7.3.1
Differing professional levels and professions	7.2.1
Differently abled people	7.2.3
Differing work and travel commitments	8.3.4
Differing time availability and flexibility	8.3.4
Differing digital literacy levels	5.5.3
Differing self-directed and online learning abilities	5.5.9 & 5.6.4
Differing access to devices and internet	5.5.1 & 5.5.2
Differing language proficiencies	5.6.3 & 6.4.2
Differing cultural norms and religious views	6.4.3
Differing political views	6.5 & 6.6
Differing countries and contexts	8.2.1

Source: Author’s own

MOOCs thus brings together a plethora of people from differing backgrounds with differing needs and differing intentions for doing the MOOC (DeBoer et al. 2013; Scagnoli 2012). It is important, however, to remember the imbalances in representation of these different groups, as highlighted in Chapter 2 (Bozkurt, Akgün-Özbek, and Zawacki-Richter 2017; Hansen and

⁴⁰² The marginalised groups category is an exception to this; however, marginalised groups cannot be lumped into one homogenous group. They each have unique factors to consider, for example, language. This is expanded on in Section 9.4.2

⁴⁰³ This is a non-exhaustive list.

Reich 2015; Lockley 2018). *A justice-oriented MOOC seeks to address the imbalances in representation of those who differ from the dominant.*

9.3.4.2 *Defining the target group and useful prior knowledge*

This section discusses the importance of clearly stating who the course is aimed at and what prior knowledge might be useful, as a step towards designing justice-oriented MOOCs. While many of the MOOC designers interviewed could describe their target group succinctly, some said the course is open to anyone *'passionate about learning'* and has no prerequisites (Ahmed). Craig was very open about not even thinking about the target group:

'I didn't think who was I talking to. I just thought this is like a video ...So if I ever were to do one again, I would be much more mindful ...of the diversity of people I'm talking to.' (Craig)

While MOOCs are open to all, there is a difference between who the course is technically accessible to versus who is it designed for and who will benefit most from it, as highlighted by Richard in Section 8.3.2. Even though the MOOCs are technically open to all, sometimes the type of prior knowledge that would be beneficial to have, impacts how well something can be learnt. For example, Chris states: *'[I]t would be beneficial to have some sort of biological background ..., people need to know what a cell is for example.'*

MOOC platforms deal differently with this issue of defining target groups. While FutureLearn has a 'Who is this course for?' section on the MOOC landing page, Coursera and edX do not. In the latter two, the target group is sometimes mentioned optionally in the course description.

MOOC landing pages also tend to all state they are beginner's level or introductory courses. The word 'Introductory' is particularly ambiguous. For example, a Wits course on edX is titled *'Introduction to Stewart's Model of Physiological Acid-Base Chemistry'* and its level is marked as 'Introductory'. While it is introductory and accessible to all technologically, it may not be accessible in terms of the prior knowledge needed; realistically one will benefit most if they have some prior knowledge with that topic. Even if the prior knowledge is not necessary but useful, it is beneficial to state it. Fortunately, the course description mentions that it is *'[a]imed at physicians, ICU nurses and others working in acute care'* which can appropriately guide interested learners in deciding whether they would be able to best benefit from this course.

This is not to say that MOOCs shouldn't contain difficult or specialised content, but rather that *explicitly stating difficulty levels and preferred prior knowledge is useful so that interested*

learners are made aware. A MOOC does not always need to be in its most elementary form, without expectancy of any prior knowledge in the subject area, to be justice-oriented. If the target group was marginalised youth than this would be necessary, but if one were to address environmental justice in marine ecosystems, for example in *'Large Marine Ecosystems: Assessment and Management'*, specialist knowledge would be useful. What is important is to *specify* the target audience and level, of which, this course is one of the few marked as 'intermediary' level. Additionally, these MOOCs can be preceded by entry level MOOCs i.e. learning paths that cover the basics needed in order to fruitfully benefit from the higher-level courses. As universities often want to portray the most cutting-edge research however, this approach does not match with the university's mandate.⁴⁰⁴

In summary, good practice regarding the target group involves:

- being intentional about who the MOOC is broadly being designing for when conceptualising the MOOC
- being explicit about *what* prior knowledge and level of expertise would be useful or necessary
- being explicit about *who* would benefit most from the MOOC

A good example of this is UCT's course on FutureLearn called *'The Unbundled University, the Market and Digital Technology'* shown in Figure 9-2. The 'Who is this course for?' section states:

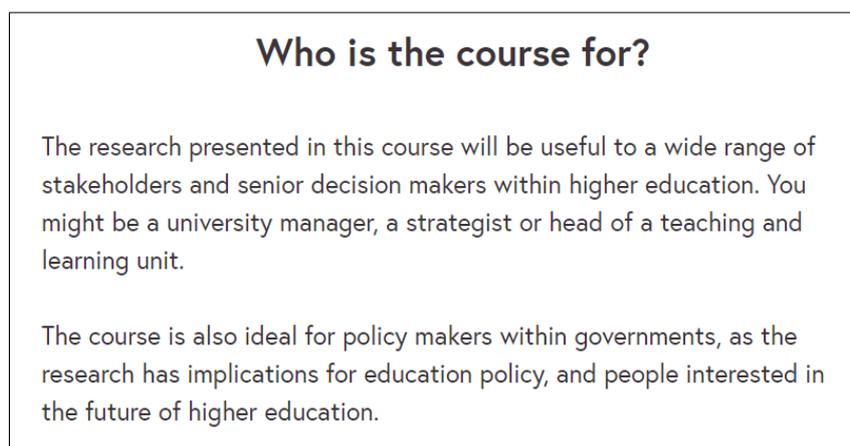


Figure 9-2 Screenshot of the 'Who is this course for?' section of *'The Unbundled University'*

Source: UCT MOOC on FutureLearn

⁴⁰⁴ This is unpacked in Section 9.3.5 when discussing choices that suit the Potential MOOC Participants

Even though the subject content for this MOOC is non-technical and would be understandable to all, it still describes who it is design for and will be most beneficial for.

9.3.4.3 *Benefits of leveraging of the diversity within the MOOC*

Although it is argued above that specifying the target group and prior knowledge is beneficial, this is not to say that the MOOC should not cater to its diversity. Indeed, the two are not mutually exclusive. Nnenne articulates this well, where despite being specific about her MOOCs target group as *‘educators from all the African countries and other middle to low income countries’*, she also emphasises that she wants to *‘get different places talking’* to benefit from *‘the lessons that can be learnt across continents’*. Chris mentions a similar scenario in his course, where although his *‘target audience was a very specific group ... medical students’*, there was *‘a cardiovascular surgeon who did the course’*. He elaborated on how such participants with practical experience could contribute to the course, for example *‘raising issues, sa[ying], “You know, that is great, but there is one thing that is not realistic about this model”’*

Thus, while it is important to know what prior knowledge is needed as a starting point for new knowledge construction⁴⁰⁵ the benefit of learning from the diversity of the group can also be harnessed⁴⁰⁶. Familiarity is needed to feel a sense of belonging, and difference is needed to push one’s thinking and create room for exchanging ideas from different contexts, education levels and professions. Through such exchange, beneficial community of practices can be built such as those outlined by Ranjeni in Section 8.2.3. *Building these communities of practice where people from different walks of life can come together for some common interest is one of the most impactful features of MOOCs* that can be leveraged on, particularly in designing justice-oriented MOOCs that aim to challenge cultural-epistemic injustices through representing a diversity of voices, experiences and knowledges.

9.3.5 Choices that suit the PMPs

This section reflects on the aforementioned themes regarding epistemically diverse MOOC design teams and the purposes of the MOOCs, with the PMPs as the target group in mind. When designing for marginalised groups like the PMPs, partnerships with local NGOs and engagement with community members emerged as being crucial as it allow for the needs, preferences, and aspirations of the community to be included in the design process. This was

⁴⁰⁵ This is in line with constructivist pedagogical approaches outlined in Section 9.5.3.

⁴⁰⁶ This is in line with social constructivist pedagogy approaches outlined in Section 9.5.3.

mentioned by Mishqah as well as experienced in my own study through the benefits of partnering with Siyafunda.⁴⁰⁷ MOOC designers wishing to make an impact in specific local communities could follow similar processes.

In terms of categorisation as a group, the PMPs fall into the marginalised group (as defined in Section 4.5.2) and the work-seekers group. From the purpose-focused categories of MOOCs, the gateway skills and workplace skills categories suited the PMPs the most. This subsection outlines the matches and mismatches between the type of MOOCs on offer by universities, and the educational needs of the PMPs. I also highlight where there are matching interests that has not been yet been leveraged.

As was highlighted across Chapter 5, PMPs strongly want to further their education but lack the personal mentorship and career guidance. This is where *there is a strong match between the Gateway MOOCs provided by universities and the needs of the PMPs*. As Gateway MOOCs tend to be locally focused (Czerniewicz et al. 2014), this serves the interests of the PMPs. This also serves in the universities interests as it attracts more undergraduate students and at the same time prepares them for what will be expected of them at university. At present, there are very few Gateway MOOCs produced by South African universities and this would be a good leverage point to harness. The top fields of study that PMPs were interested in, that could be pursued at a university level, were education, computer science, psychology, health care, business administration, engineering and law.

In terms of vocational skills, there is a mismatch in what is provided by universities and what is needed by the PMPs. Some of the vocational skills wanted by PMPs were hospitality, electrical wiring, plumbing, masonry, security and beauty therapy among others (Section 5.4.2). General skills such as accounting, marketing, and business were also mentioned. Vocational skills are neither the speciality of universities, who focus more on academia, nor does it fit the universities' rationales for MOOCs that aims to showcase the universities niche expertise. In this case, Technical and Vocational Education and Training (T-VET) colleges would be better off producing MOOCs for these sorts of topics. From the perspective of the MOOC platforms reviewed in this study, namely Coursera, FutureLearn and edX, it is neither in their interest to produce such courses as their selling feature is their association with high-status universities (Coughlan 2013). Other free online courses platforms exist, however,

⁴⁰⁷ As highlighted in Section 4.5.2, it is only through the connection with Siyafunda that I was able to easily reach participants. Thereafter, there was no difficulty or shortage of finding participants to participate in studies. If anything, the difficulty was restricting the number of people that could attend.

such as Alison, that do cater for vocational needs. Coughlan (2013) highlights that the divide between academia and vocational education has begun to play out in the online education space and this is seen between the different focuses of online learning platforms. Alison endeavours to focus on vocational, workplace skills that improve students' employability (Coughlan 2013). The platform offers introductory courses to a variety of professions and provides learning paths as students develop their skills. The platform features also guide students in choosing the most applicable courses for their vocational aspirations. Alison has proved to be extremely popular in developing countries such as India and is becoming increasingly popular in South Africa, where some of its courses are even accredited (Learning News 2009). While popular, they could be viewed as well-curated OERs rather than fully-fledged learning environments due to lack of engagement with educators, tutors or peers and lack of a course cohort. While South African universities may not be inclined to do vocational MOOCs, partnerships between TVET colleges and online course platforms like Alison would serve to meet the PMPs needs.⁴⁰⁸

PMPs also highlighted that soft skills and computer literacy skills were what they most needed to support them in finding employment (Section 5.4.2). These soft skills included communication skills, presentation skills, negotiation skills, confidence building, personal conduct and self-development amongst others. None of the MOOCs in South Africa specifically focused on these skills. The reason for this is likely that such courses do not showcase the unique expertise of the university as they are quite conventional, highlighting a mismatch between the institutional rationales for MOOCs and the PMPs educational needs. On FutureLearn, however, there are a handful of courses internationally that focus on soft skills and personal development topics such as leadership⁴⁰⁹, negotiation skills⁴¹⁰ and self-awareness⁴¹¹. On Alison, there was a more explicit focus on soft skills and personal development skills from communication skills to managing personal finances or stress levels. Some soft skills that PMPs mentioned, such as problem-solving and critical thinking, could fall within the universities mandate for MOOCs as well as meet the needs of PMPs.

Beyond vocational needs and soft skills, PMPs also mentioned many problems in the community (Section 5.3). Some of these problems involve teenage pregnancy, unjust legal

⁴⁰⁸ Currently, to my knowledge, no such partnerships of this nature exist.

⁴⁰⁹ Management and Leadership: Leading a Team, FutureLearn: <https://www.futurelearn.com/courses/leading-a-team>

⁴¹⁰ 'Successful Negotiation: Essential Strategies and Skills', FutureLearn: <https://www.futurelearn.com/courses/successful-negotiation>

⁴¹¹ The Self-aware Coach, FutureLearn: <https://www.futurelearn.com/courses/self-aware-coach>

systems, health care, drugs, crimes, physical abuse, sexual abuse and depression. In Chapter 6, it was also noted that the PMPs were not aware of their legal rights or opportunities. While MOOCs cannot solve these problems, they could equip PMPs with further information on these topics and possibly set up community groups to tackle issues together. These types of courses would be pursued by PMPs to solve critical problems in their communities rather than gain skills for employment. Here, there is a match between the type of niche MOOCs that universities might want to provide, and a MOOC that meets the PMPs needs and interests.

9.4 Situating the MOOC

This level of MOOC design is what is most often overlooked as design teams go from conceptualising the MOOC to constructing it (e.g. (Kauffman and Kauffman 2015)), without properly interrogating the bigger picture surrounding the MOOC i.e. the societal, political, and environmental contexts that it is being designed for.⁴¹² As highlighted by Francois in Section 8.3.2, before we can talk about cultural-epistemic diversity in MOOCs, the material barriers that limit the marginalised participating in MOOCs needed to be addressed *‘absolutely deliberately’* else MOOCs may serve to amplify inequality.⁴¹³ In Section 7.3 it was argued that the location that the MOOC is produced in has an impact on the design of the MOOC. As structural and material inequalities are so stark in South Africa, many MOOC designers sought to address barriers to accessing MOOCs. The practices outlined in the following subsections arise from and are for South African contexts but may be useful in other Global South contexts.

9.4.1 Technological Accessibility

Technological accessibility is an important consideration in the design of justice-oriented MOOCs to reach people with resource constraints or people with disabilities. This thesis is premised on the fact that simply putting something online does not make it automatically accessible nor does it democratise education opportunities, thus further efforts are needed. However, acknowledgement needs to be given to the improved levels of access that MOOCs do provide such as access to free or low-cost courses, and high-quality content (Section 2.4.1).

⁴¹² A reminder here that whilst it is key to determine how the MOOC will be situated before it is constructed, it also needs to be continuously revised and reflected upon while it is being constructed and implemented, and thus is not chronological step.

⁴¹³ In Section 8.3, it was highlighted that the material injustices that the marginalised face need to be dealt with at municipal and societal levels rather than within the education system alone. Thus, while MOOC designers’ practices to make their MOOCs more accessible are highlighted in this section, they also acknowledged that these efforts were ameliorative and do not overcome the structural inequalities that marginalised participants face.

South African MOOC designers, guided by their technical support team members, made concerted efforts to remove as many technological barriers to access that they could. Drawing on MOOC designers' comments in Section 8.3.4, Table 9-6 lists some of the best practices that interviewees took to using technology in a way that improved accessibility:

Table 9-6 Technological adaptations

Technological Accessibility	Usage
Mobile compatibility	For participants who do not have frequent access to a computer, mobile compatibility is crucial to including them. This means ensuring the content is viewable through a mobile application or on a website scaled to mobile view.
Shorter Videos	For participants that have low connectivity speeds, short spans of time to do the course in, or travel frequently, short length videos are essential. This is also useful to keep participants attention.
Transcripts/Subtitles	For participants who cannot speak English, are English second language learners, or have a hearing impairment, captions, transcripts or subtitles are useful. Additionally, including descriptive text of images and charts is beneficial for visually impaired learners.
Downloadable	For participants who do not have continuous access internet, this is beneficial. Additionally, being able to download helps content be reusable and revisable as well as be able to be taken to remote areas where there is no internet connectivity. It also allows for subtitles to be added.
WhatsApp groups	For participants who find the platform discussion board cumbersome, unfamiliar and data-intensive, WhatsApp groups are useful. WhatsApp groups allow for freer and friendlier flow of conversation, they are quicker to access (than logging on to the course), they have the ability to make regional or interest-based subgroups and have lower data costs.

Source: Author's own

While these practices are designed for people with resource constraints or people with disabilities, MOOCs that claim to be for everyone, need to remove as many technological barriers as possible to ensure then that everyone can access the content in some way. Thus, such technological accessibility should be a standard in every MOOC, irrespective of it being justice-oriented.

9.4.2 Language Accessibility

As MOOCs intend to reach global audiences, ‘global’ languages were preferred by South African MOOC designers.⁴¹⁴ English was chosen for reasons outlined in Section 8.2.4. For MOOCs that were targeted towards African countries, MOOC designers chose not to translate to African languages, but instead chose languages such as French and Arabic as outlined by Riyaadh and Nnenne in Section 8.2.4.

In designing justice-oriented MOOCs, language is the trickiest choice because, with budget and time constraints, it is difficult to include a large array of languages, and by virtue of this will inevitably completely exclude entire groups that do not speak any of the selected languages. For this reason, *the massiveness of MOOCs is often at odds with supporting marginalised groups when it comes to languages*. The best way to work around this is through ensuring the content is reusable and revisable and actively encouraging participants and local NGOs to translate the MOOC into their local languages. This was the case with Evan being approached by Argentinians to ask for permission to translate his MOOC (Section 8.2.4).

As choosing languages to translate to depends on the target group, ‘marginalised’ needs to be sub-categorised into local marginalised groups within a specific country, marginalised groups across LMICs, and marginalised groups who face inequality within wealthier countries, as each of these have different language requirements. In the case of many of the MOOCs reviewed, the focus was Africa and LMICs. While it is understandable to not choose to translate to a niche local language like isiZulu⁴¹⁵ (≈27 million speakers) that would only appeal to a few within South Africa, there are widely spoken continental lingua franca such as Swahili (≈60 - 150 million speakers) and Hausa (≈150 million speakers) in Africa or Hindi (≈544 million speakers) in South Asia (Critical Languages Program 2016; Head 2019; Julian 2017).⁴¹⁶ There are far more Hindi speakers in the world than French speakers (≈229 million speakers) (ibid.), especially in LMICs. Choosing to translate to these widely spoken languages, instead of colonial languages such as French, *would promote knowledge production in these languages and reach the marginalised those who cannot speak ‘global’ languages* and who do not have access to much high-quality educational content. Using this justice-oriented approach would

⁴¹⁴ While Mandarin Chinese, Hindi, Russian, Malay and Bengali are within the top 10 most spoken languages in the world, they are mostly spoken within their countries and regions. ‘Global’ thus refers more to the breadth of countries and people across the world that can speak the language. Languages that have the most breadth are usually languages of former colonisers who taught these languages to their former colonies.

⁴¹⁵ isiZulu is the most spoken South African home language (BusinessTech 2019).

⁴¹⁶ Figures include native and non-native speakers.

still serve a massive target group, *and* they would likely be the ones to need the educational resources more than the ‘global’ language speakers. Opting not to translate to local languages, such as isiZulu or isiXhosa in the case of South Africa, shows a mismatch in the institutional rationales for MOOCs and their ability to support local marginalised groups. The technological efforts by the Cambridge MOOC centres to prioritise translation for non-English speakers and learner support for English Second Language learners is particularly noteworthy as they have identified one of the biggest barriers to MOOC uptake and have endeavoured to provide support to these learners.⁴¹⁷

9.4.3 Learner Support

Distributive principles of justice generally have two aspects to it with regard to access; being ‘equitable in the distribution of material benefits’ and supporting those that are ‘not equitably positioned in their capacity to take up these benefits.’ (Keddie 2012:266). Thus, MOOC designers need to go *beyond providing* resources, to *ensuring that support is given* to disadvantaged participants to put them on equal footing with others such that they can fully utilise opportunities that have been made freely available online.⁴¹⁸ This support goes beyond technological adaptations to supporting the learner in their journey to and through the MOOC. A common feature of MOOCs is that they require self-directed learning, and this in itself is a barrier to usage. The following four subsections show how MOOC designers could support participants better.

9.4.3.1 Navigation and usage support

Guiding participants on how to navigate around the platform and explaining its layout is something that needs to be explained to the novice participant who is not familiar with self-directed learning. MOOC designers need to be aware of what support the platform provides for participants, and what it does not. For aspects that the platform *does* provide guidance on, for example, how to download a video, it is important to point the participants to these resources. For support not provided by the platform, or perhaps relating specifically to the course, such as the need to download specific programmes or tools, explicit guidance needs to be given. Figure 9-3 from the ‘*Education for All*’ UCT MOOC is an example of this, where articles of how to use FutureLearn are built in as steps in the course; 1.4 links to a pre-existing

⁴¹⁷ This is said with caution as technological solutions are not a panacea to the language problem.

⁴¹⁸ This resonates with findings from Chapter 6 where, although historically-white educational spaces have been made legally accessible to all, further barriers limit the PMPs from accessing these resources.

FutureLearn article, while 1.5 and 1.6 are written by the MOOC designers and give specific advice related to the course itself.⁴¹⁹

Using the course and introduction to contributors

Tips and suggestions on how to use this course and the FutureLearn platform. We also introduce you to the course contributors.



- 1.4 HOW TO USE FUTURELEARN ARTICLE
- 1.5 GETTING THE BEST OUT OF THE COURSE ARTICLE
- 1.6 SHARING EXPERIENCES - MANY PERSPECTIVES ARTICLE

Figure 9-3 Week 1 of 'Education for All' MOOC

Source: UCT MOOC on FutureLearn

Figure 9-4 shows another good example of a supportive introduction to the 'Results Based Project Management MOOC' Wits MOOC on edX. It also gives an explanation of the logistics of the course, and how to get the most out of the course. One of the links points to the edX Demo course for first time users of the MOOC, which seems to be a common feature in edX MOOCs. It introduces the course instructor, and also places emphasis on the Teaching Assistants (TA's) as they are the ones likely to be interacting more closely with the participants than the MOOC Instructor.

⁴¹⁹ As a methodological note, if I mention a course name or show screenshots from a course, I do not mention the MOOC designer comments related to it to protect the identity of the MOOC designer.

▼ Week 0: Welcome	
▼ Introduction to the course	
Welcome to RBME101x	
Course Logistics	✓
Getting the Most Out of the Course	✓
About the Instructor	✓
Our Community TA's	✓
Credits	✓
▶ Meet Your Classmates	✓
▶ Survey: Tell Us About Yourself	
▶ Pre-Course Assessment	
▶ Course Readings	

Figure 9-4 Week 0 of 'Results Based Project Management' MOOC

Source: Wits MOOC on edX

Abidi et al. (2017) also emphasise this point for MOOCs in LMICs, stating that 'the way around the webpages, videos, tasks, and assignments, should be explained with easy-to-follow, step-by-step instructions.' This is not only useful to people in LMICs but also to less tech-savvy people.

Another way of supporting learners, outlined by Crosslin (2014), is to design multiple pathways to accommodate the various levels of participants. While the Cambridge MOOC centres are designing for this technologically through adaptive and personal learning paths, this can also be done simply through ensuring the basics are laid out for all in MOOC platform and encouraging advanced participants to take up more connectivist strategies such as writing reflective blog pieces.

9.4.3.2 Centring humans

In courses with thousands of participants, it is easy to lose the personal touch and extra attention needs to be paid to nurturing the student-instructor and student-student connections (Bali 2014). Participants can feel lonely and lost if they do not feel connected, thus, Bradley (MS08M5W) mentioned a useful technique whereby he encouraged those enrolled to invite a

friend or colleague to do the MOOC with them, so they had familiar company and added motivation. Another useful practice in the MOOCs of Uni1 was the introduction of all the various people involved in creating the MOOC, including instructors, co-presenters, guest presenters, teaching assistants and support team members. These practices give the participant a feel of a community of people.

The impact of MOOC designers being personable and speaking from the heart was mentioned by Nnenne in Chapter 8.2.3. Caroline similarly highlights the *'lovely warm personality'* of her co-designer that was crucial to creating a space of sharing and similarity. When the MOOC designers opened up is led to participants opening up, *'Some were saying, this is the first time I'm talking about this - on this platform.'* (Nnenne). Just as in a classroom, the MOOC instructor sets the atmosphere and warmth of the course.

9.4.3.3 Teaching assistants

In massive courses, it is necessary to have people with expertise to engage with participants; particularly in managing the discussion boards. Teaching Assistants (TA's) are often used for this if the MOOC team can afford it. Chris mentioned,

'I didn't monitor the forums directly, I sort of had a high-level oversight of them but we had teaching assistants and who monitored them more directly and responded personally.' (Chris)

On the other hand, Ahmed personally managed his MOOC:

'I never relied on a tutor for example, to communicate with the students, I thought that this is an opportunity for me as an educator on the course to engage with students.' (Ahmed)

Both methods have their merits; when MOOC designers communicate with participants, they gain a sense of how they are getting along in the course; when TA's engage more with the participants, the participants may feel they can relate more as the TA's can be more approachable than a professor. TA's also bring about more diversity to the course, as well as different perspectives that may not have been raised by the MOOC Instructor (Anthony). It is useful for the MOOC instructor to spend at least some time engaging with participants as this can feed back to their teaching. The engagement on the forums by MOOC instructors depends on the time they have outside of their other duties and the number of teaching assistants also depends on the funds that the MOOC has for hiring support.

9.4.3.4 MOOC designer training

To better support participants, MOOC designers need to be properly trained in how to design and implement a MOOC. Some of the MOOC designers confessed they had never done a MOOC before. Craig shared his opinion on this:

'I can't tell you because I haven't seen many other MOOCs. What I can tell you is I knew nothing about MOOCs. I was naive. I just thought a MOOC is a lecture in front of a camera.'

While they might be subject experts, they may know little about openness, pedagogy, and digital pedagogies. Even MOOC designers who had a background in education, such as Nnenne, Caroline, Riyaadh and Ahmed, struggled with the technical side of MOOCs.

Riyaadh who did not have a technical support team, had to figure out the technical aspects of MOOC design, and struggled with the coding aspects of it. Training MOOC designers in the facets of MOOC design (like those highlighted in this chapter), as well as the basics of open and digital pedagogies, and principles for teaching-at-scale, will support them in designing better MOOCs.

Other aspects of learner support, such as peer-to-peer interaction and learning theories, carry over into pedagogical and participatory practices and will be discussed in Section 9.5.3.

9.4.4 Awareness and Advertising

Creating awareness about the MOOC is important for people to know it exists. Hodgkinson-Williams et al. (2017) highlights, '[f]urther circulation amongst potential users of the OER is required to raise awareness of the existence of the OER'. As was highlighted in Section 8.3.5, there was a lack of effort in reaching out to local groups, as reliance was put on the MOOC platforms to advertise. These platforms are insufficient in reaching out more marginalised audiences, in particular, the local South African audiences.

The concept of a MOOC is not common knowledge: *'if you walk outside and say the word MOOC no one knows what you are talking about.'* (Evan). Anna similarly highlights the overwhelming nature of MOOCs, *'I think MOOCs could be liberating but I think it's so overwhelming that people don't even know what to look for and where to look for.'* Thus, it is not enough to simply announce that a new MOOC is available but to explain what a MOOC is and how it is used, as Riyaadh did (Section 8.3.5). Additionally, within marginalised contexts,

potential participants need to know that the courses are downloadable (if they are), transcripts are available, and financial assistance for certificates can be requested (Mishqah; Riyaadh).⁴²⁰

Drawing on the comments of MOOC designers outlined in Section 8.3.5, Table 9-7 outlines the conventional methods used in most MOOCs to advertise beyond what the MOOC platforms did.

Table 9-7 Conventional advertising methods used.

Advertising Mechanism	Usage
University press releases	All the universities did some form of media release to market the MOOCs. Although these can be useful in attracting participants, the purpose of the media releases seems more related to publicising that the university is doing something to offer free education, than to target those that are actually in need of this education.
Social media	Advertising was done on platforms such as Twitter, Facebook and YouTube. These were more useful in reaching potential participants but largely would reach those already connected with the universities and platforms, such as registered students and academics.
Existing communities of practice	In some cases, advertising was done through sharing the course in existing virtual communities of practice. This begins to go beyond the spheres of the university and the platform and into a broader audience however it still only reaches those within the existing community.
Launch days	In many cases, a course had a launch day. This is probably the first type of face-to-face communication of the course. The physical launch often coincides with a virtual social media launch that creates hype about the event. Once again, it still reaches those in the periphery off the university.

Source: Author's own

As outlined in Section 8.3.5, some MOOC designers exhibited more justice-oriented approaches to advertising that reached out to marginalised groups. This is highlighted in Table 9-8.

⁴²⁰ While financial assistance for certificates is clearly advertised on Coursera, it is not the case for FutureLearn and edX. See Table 9-2.

Table 9-8 Justice-oriented approaches to advertising

Advertising Mechanism	Usage
Local radio announcements	Although less frequent, some MOOC designers mentioned using local radio to advertise the courses. This is probably the most effective in getting the news out beyond existing circles. The use of local language radios particularly helped to reach marginalised groups.
TV announcements	TV announcements were also highlighted as a method to reach diverse groups. Different TV stations will reach the audiences and advertising on channels that reach the masses will allow for the broadest reach.
Participant stories online	Participant stories were used as a way for current or past participants to encourage new participants to take on MOOCs. These stories gave a personal reflection from a participant's perspective, highlighting how easy it was to navigate through the course and the opportunities it opened up for them.
In-person learning hubs	Creating hubs for in-person participation in the MOOC was the most concerted type of effort to reach marginalised groups that would be unlikely to come across MOOCs on their own or use them independently. These hubs depend on building strong partnerships with other institutions or organisations.
Word of mouth	Word of mouth proved to be a particularly powerful way to spread news of the MOOC and also encourages participants to take the MOOC together with people they know.

Source: Author's own

The above methods demonstrated ways of raising awareness beyond the internet and existing communities. Methods that reached out physically rather than virtually, such as encouraging local learning groups, advertising on local radio stations, and using word of mouth⁴²¹ in the right communities, proved most successful in increasing participation of marginalised groups. In addition to these, Abidi et al. (2017:504) highlight that '[u]sing printed matter is particularly important in an LMIC setting'.

9.4.5 Choices that suit the PMPs

In looking at participant's access to computers and smartphones in Section 5.5, only 24.3% of participants owned a computer, and only 22.1% had access to internet at home.⁴²² In contrast, 75% owned a smartphone and a further 15% had access to a smartphone through a friend or relative. From this we can see a crucial need to ensure that MOOCs are accessible through smartphones if the aim is to reach these PMPs. One drawback experienced from the study in Umgababa, where mobile phones were predominantly used, was that many PMP's phones were

⁴²¹ 'Word of mouth' can also be spread through technological mediums like WhatsApp.

⁴²² The more common ways of accessing the internet was internet cafes, used by 55.7% of PMPs, and libraries, used by 50.6% of PMPs.

models that did not have much memory space and battery life (Section 4.6.1.5). Despite this, using mobile phones proved quite successful, taking its limitations into account. In another location, Mankweng, YouTube was blocked which led to very mixed feelings about the use of video (Section 5.6.4). Thus, when embedding videos into courses, it is important that there are alternative URLs for them in case any particular version is blocked.⁴²³

Technical support was crucial in running the online course, as has been elaborated upon in Section 5.2. Digital literacy levels were extremely varied and basic tasks such as clicking hyperlinks, managing multiples tabs, and navigation through the course steps needed to be explained explicitly for some. However, most things only needed to be explained in the beginning of the day and learning curves were quickly overcome (Section 5.2).⁴²⁴ From this, it seems that PMPs do not necessarily need continuous technical support, but rather initial support. Having a generic once-off ‘how to do a MOOC’ course, similar to edX’s Demo MOOC, in local communities would be extremely useful in helping PMPs over the initial learning curve. It was also noticeable that PMPs depended a lot on speaking to their peers (rather than me, the facilitator) when they had a problem. Thus in-person learning groups could be set up for participants to support each other. Working with local community centres provides some of the support that participants may need in completing a MOOC; not only basic resources but also moral support through being with others completing similar tasks. Further discussions on blended learning approaches will be made in relation to pedagogy and participation.

Regarding language, responses from the feedback survey indicated that 66% of participants understood most of the course while 32% struggled to understand it (Section 5.6.2). In analysing the quality of English in survey answers, it was evident that the English level used was too difficult and needed to be made simpler. Although explanations of words were given, there might have been an overload of new words to remember. When asked which language they prefer the course to be in, 78.8% preferred for it to be taught in English (Section 6.4.2). This validates MOOC designers’ choices to make MOOCs in English. isiZulu voice overs were included in the videos before running studies in Kwa-Zulu Natal which has a predominance of

⁴²³ At the time of interviews, edX was said to be shifting away from using YouTube as it was blocked in many countries (Bradley)

⁴²⁴ Once someone was taught, for example, how to move a mouse, insert a special keyboard character, or to Google a word, they continued to do so on their own.

Zulu speakers and much lower English fluency. These isiZulu videos were appreciated in those regions but not so much in other provinces.

Thus, if the course is being designed for specific local, audiences who speak a predominant local language, e.g. in Kwa-Zulu Natal, then transcripts in local languages would be most useful. If the MOOC is pre-existing and global-facing, ‘wrapping’ the MOOC through working with in-person learning groups would be a better solution to overcoming language difficulties and applying the content within the local context (Deacon et al. 2018; Jaffer, Govender, and Brown 2017).⁴²⁵ These in-person learning groups were strongly recommended by Chad (PR03M7W) who described this as the model for the Peer-2-Peer University (P2PU). The model harnesses of social learning principles, where in-person learning circles are set up in a neighbourhood for community members to go through free online courses together. They are led by facilitators who co-ordinate and manage the group but are not necessarily a content experts (Chad).

Besides efforts to make MOOCs more technologically accessible or remove language barriers, the first and most important aspect is to make communities like the PMPs *aware* that there are MOOCs. In the studies with PMPs, they were largely unaware of online learning in general. When asked about pursuing online courses, they had mixed feelings and wanted more information (Section 5.4.5).⁴²⁶ As was highlighted in Section 9.4.4, MOOC designers did not put much effort into this aspect, however this would be one of the easiest ways to better support marginalised communities: by letting them know these resources exist and that the resources are somewhat technologically adapted to resource-constrained contexts.

9.5 Creating and Implementing the MOOC

This section focuses on options available when constructing the teaching and learning experience in a MOOC. It is shown that the power dynamics, pedagogical approaches, participatory approaches, content and assessment of MOOCs are shaped by factors outlined in the previous three sections, namely, pre-determined institutional rationales, philosophical underpinnings of MOOCs and MOOC designers, the purpose of the MOOC, the target group,

⁴²⁵ Wrapping has a variety of meanings as outlined in Deacon et al. (2018). I draw on their notion of using wrapping informally in a community setting (rather than part of a formal university course). In this version, meetups can be done without the knowledge/direction of the MOOC designers.

⁴²⁶ 51.6% were open to learning through online education. 33.3% said it depends on the subject. 15.1% were not open at all (Section 5.4.5). Those who had access to devices, were digitally savvy and familiar with distance/self-directed learning were more open in the idea than those who struggled with digital and internet literacy and preferred in-person support.

and their contexts. Furthermore, this section also shows how *different* justice-oriented MOOCs used *different* power dynamics, pedagogy, content and assessment choices based on these factors, illustrating that there isn't one-size-fits-all way to design a justice-oriented MOOC.

9.5.1 A Comparison of Six Justice-oriented MOOCs

In order to discuss the different approaches used by MOOC designers, and the different points in which they placed emphasis depending on their purpose and target group, Table 9-9 tabulates six MOOCs that explicitly strove to be justice-oriented in some way. These courses are discussed and compared in the subsequent subsections. As the table gives information about the courses that could possibly make them identifiable, MOOC designers' names and university numbers are not mentioned when mentioning the course in order to maintain a level of anonymity.

Table 9-9 Comparison between six justice-oriented MOOCs

	Purpose and Target Group	Design Process, University Support and Platform Choice	Pedagogy and Participation	Content Formats and Types	Activities, Assessment and Accreditation
A	<p>Introduce African decolonial discourses</p> <ul style="list-style-type: none"> • Towards the university's students • >10 000 participants 	<ul style="list-style-type: none"> • Top-down from senior management • Commissioned by management with funding • Outsourced content design • Blackboard 	<ul style="list-style-type: none"> • Instructivist pedagogical approach • Low peer-to-peer interaction • Unused 'student voices' tab 	<ul style="list-style-type: none"> • Mostly readings as well as podcasts, blogs from TAs and videos of excursions to historic sites • Introduction to the works of African scholars, poets, philosophers, novelists, social activists and politicians covering themes such as African identity and the role of language and its impact on African literature 	<ul style="list-style-type: none"> • Automated assessment • University credits
B	<p>Introduce African decolonial discourses</p> <ul style="list-style-type: none"> • Towards the university's students • >1000 participants 	<ul style="list-style-type: none"> • Bottom-up from students • Side project within a non-academic department • Funded from a professor's research budget • Blackboard 	<ul style="list-style-type: none"> • Liberationist, subversive pedagogical approach • Co-created with other students • Low peer-to-peer interaction in implementation 	<ul style="list-style-type: none"> • Mostly readings as well as interactive graphics, and recorded student reflections • Introduction to key African thinkers on decoloniality, African spirituality, the politics of knowledge production, and Pan-African thought 	<ul style="list-style-type: none"> • Automated assessment • Initially unsure but now taken for university credits
C	<p>Understanding philosophies of teaching and learning in an African context</p> <ul style="list-style-type: none"> • Public-facing • Anyone interested • >5000 participants 	<ul style="list-style-type: none"> • Driven by one leading professor • Department funding • FutureLearn 	<ul style="list-style-type: none"> • Socratic (critical but not objectivist) & social constructivist approach • No peer assessment • Strong emphasis on discussion, debate and sharing ideas • No one right answer 	<ul style="list-style-type: none"> • Videos and readings • Case studies • African philosophies of education, knowledge production, Ubuntu and justice in relation to African education 	<ul style="list-style-type: none"> • No assessment • Critical discussion prompt questions • Certificate of participation

D	<p>Explores ways of inclusive education in resource limited areas</p> <ul style="list-style-type: none"> Public-facing Professionals, educators and care-givers from resource-limited areas >5000 participants 	<ul style="list-style-type: none"> Driven by a leading professor, other academics and practitioners Involved various stakeholders from conceptualisation University and external funding FutureLearn 	<ul style="list-style-type: none"> Social constructivist approach Peer review (peer feedback with no grading) Strong emphasis on discussion and sharing context and personal experiences No one right answer 	<ul style="list-style-type: none"> Videos and readings capturing theory, practice, experiences and personal stories Principles and approaches to inclusive education, environmental and social barriers to education, applications and ideas for inclusive education practices 	<ul style="list-style-type: none"> No assessment Good discussion prompt questions Certificate of participation
E	<p>Improving management of public sector programs</p> <ul style="list-style-type: none"> Public-facing Professionals, civil service workers, programme managers >8000 participants 	<ul style="list-style-type: none"> Driven by leading academics Interviewed senior decision-makers and practitioners in the field University funding edX 	<ul style="list-style-type: none"> Instructivist Participant-organised WhatsApp groups formed Little emphasis on the use of discussion forums 	<ul style="list-style-type: none"> Videos, interviews and readings on theory and practice Understanding approaches to project management, understanding key theory, understanding indicators, baselines and targets, using monitoring and evaluation 	<ul style="list-style-type: none"> Automated assessment, with interactive graphics Certificate of completion (based on passing grades)
F	<p>Understanding climate change from Global South perspectives</p> <ul style="list-style-type: none"> Public-facing Professionals and researchers >10 000 participants 	<ul style="list-style-type: none"> Driven by leading academics Collaboration across different institutes/countries University funding Coursera 	<ul style="list-style-type: none"> Constructivist Peer assessment (peer graded) Correct understanding of theory is assessed Context-sharing encouraged formally through peer assessment Partial emphasis on the use of discussion forums 	<ul style="list-style-type: none"> Videos and readings on theory and practice, drawing out tensions and debates in the field Understanding the complexity of climate change mitigation, exploring approaches and techniques which tackled these challenges, reflecting on expertise and experiences from the Global South 	<ul style="list-style-type: none"> Automated assessment (critical thinking needed) Peer-graded assessment Certificate of completion (based on passing grades)

Source: Author's own

9.5.2 Power Dynamics

Power dynamics in this sense refers to who controls power in the education setting (Section 2.4.4). Drawing on Section 9.3.2, MOOCs take on different power structures based on different epistemological assumptions i.e. fundamental assumptions about how people learn. This section makes explicit the power dynamics that were evident in the MOOCs reviewed. Beyond philosophical understandings, it was also found that institutional involvement, based on their rationales for MOOCs (Section 9.2.1), impacts the MOOCs power structure. Findings here add to Crosslin's (2016:86) three power structures,⁴²⁷ where two further power structures were identified from the courses reviewed. Crosslin's (2016:86) third power structure which described distributed expertise of a collective group (connectivism) was not found in the South African MOOCs.⁴²⁸ The five power structures identified in South African MOOCs, along with associated pedagogies⁴²⁹ and examples, are outlined in Table 9-10.

Table 9-10 Power structures of MOOCs reviewed

Power structures	Description	Associated Pedagogical Approaches	Example
Management decreed	This is a course whose topic and method of implementation has mainly been guided from senior management to meet an institutional objective. The MOOC designers are guided by this objective and need to ensure that the MOOC keeps in line with this objective.	Instructivist	Course A
Expert instructor led	This type of course is led by academic experts. The purpose of the course is to share this expert knowledge with the participants and then assess if participants have <i>correctly</i> understood it.	Instructivist	Course E
Expert instructor led + participant interaction	This type of course has academic experts who share expert knowledge and encourage participants to <i>reflect</i> on the topic in their own lives and contexts.	Constructivist	Course F

⁴²⁷ Crosslin's (2016:86) three power structures include: expert instructor (instructivism/cognitive-behaviourism), expert instructor and active participant (constructivism and social constructivism), and distributed expertise of a collective group (connectivism). I have separated his second category into two; one weighted towards the expert instructor with light participation, and one heavily focused on participants as the main source of knowledge and learning.

⁴²⁸ Possible explanations for why connectivism was not prevalent in South African MOOCs are given in Section 9.5.7.

⁴²⁹ Different pedagogical approaches *could* be mapped to each power structure, but these are the combinations that emerged from the MOOCs reviewed and are the likely combinations.

Expert facilitator guided + participant contribution	This type of course has an academic (who may be an expert) act as facilitator through the course. They provide expertise but encourage discussion and knowledge sharing such that knowledge is co-created through the course.	Social constructivist/ Socratic	Course C & D
Student-led	This type of course is created by students who endeavour to bring about alternative perspectives to dominant discourses taught to them. They draw on sources and experiences which are often overlooked.	Liberationist	Course B

Source: Author's own

The three expert-instructor/facilitator power structures has previously been discussed by Crosslin (2016), thus I want unpack the management decreed and student-led courses typologies. This is best done through the comparing Course A and B which happen to come from the same university, have the same purpose, and the same envisioned target group. The purpose and the content of both MOOCs served justice-oriented aims in that it sought to draw on knowledge sources from African authors, philosopher, poets and novelists that are often sidelined in mainstream discourses. However, their *processes* of creating the courses was completely different. Course A was decreed by senior management as a response to student calls for a decolonised education. However, the course was outsourced to a third-party individual expert in African literature who could not draw on lived experiences of marginalisation by race in South Africa as she was white and foreign. No student input was sought despite the course being a response to students' calls for decolonisation. Academics from the university were only invited to comment on the curriculum after it was constructed, and thus could not make changes in the ideologies, processes or framing.

Prior to Course A being planned, a different unit at the university already had Course B in motion, which was a student-led course with the support (and research grant funding) of an academic. The student group was made up of black students at different levels of study⁴³⁰ and from different disciplines. The students worked largely on a voluntary basis and were given a once-off honorarium. They included student voices and experiences from the inception of the course and drew on decolonial literature they had come across through the student movements and through their personal and academic research. The way in which the courses formed highlight the difference between *justice-as-content* and *justice-as-process*.

⁴³⁰ The students ranged from undergraduates to PhD candidates.

As Course A moved from design to implementation phase, many of its shortfalls were realised, and accounted for. There was an awareness from the course co-ordinator that he was a white male tasked with implementing a course on black thinking. In an attempt to rectify this, as well as include more student voices, he hired eight student tutors to promote discussion and to share their own opinions and lived experiences. This process showed a high level of *reflexivity and critical consciousness* on the part of the course co-ordinator. Whilst this addition brought more diversity of voices into the course and improved its quality, the topics for discussion were already chosen. In other words, the tutors could agree or disagree with the content of discussion, but the topic framing and terms of the discussion was already determined.

As time progressed, Course B faced many battles due to limited funding, students' workloads, personal financial difficulties, lack of support from senior management and difficulties being a non-hierarchical student group. Without deadlines, deliverables and leadership, the students lacked the self-discipline to meet their responsibilities. Furthermore, students had no experience in course design, nor experience with digital pedagogies, thus they lacked understanding of the tasks ahead of them. One student involved stated that they needed to have had a proper briefing from the onset which included timelines, deadlines and supporting structures, and which took into consideration the students' inexperience and studies. This links to the question posed in Section 2.4.4 regarding the teacher-student binary in critical pedagogy (Kincheloe 2008).⁴³¹ The students here would have preferred more steering, structure and guidance from the academics involved.

Thus, from these two examples, it is illustrated that neither a purely top-down nor bottom-up power structure was optimal. The students' voices were needed in Course A and technical expertise, guidance and funding were needed from the university in Course B. Fortunately, an agreement was made with senior management for Course B to be the next phase of Course A. They are both now supported by the university.

9.5.3 Pedagogical Approaches

This section makes explicit the connections between the epistemological underpinnings, the pedagogical approach, and the practical implementations of the pedagogy. It is also shown that these pedagogies link strongly to the purpose and the target group. Table 9-11 outlines the five pedagogical approaches used by the South African MOOC designers reviewed (Anderson and

⁴³¹ The question posed was whether the critical educator needed to relinquish all power and reduce themselves to peers of students or rather acknowledge their power and put it towards supporting the students.

Dron 2011; Boghossian 2006; Crosslin 2016; Jisc 2016; Siemens 2005; Tes 2018), including a sixth approach, connectivism (Siemens 2005), which was not present in the MOOCs reviewed, but is cited widely as the pedagogy of cMOOCs .

Table 9-11 Pedagogical approaches used in MOOC Design

Pedagogical Approach	Description of Epistemological Underpinning and Practice in MOOCs	Key Contributors	Example
Instructivist Approaches	Instructivist or behaviourist approaches are strongly influenced by positivism which is premised by objectivism (i.e. that there is a single reality existing externally to individuals). The MOOC designer uses a didactic approach to deliver content and information to students. Thereafter, standardised testing is used to determine whether students have correctly understood the content. This type of teaching is lecturer-centred and compartmentalises learning into discreet disciplines or canons. ⁴³²	Edward Thorndike Burrhus Skinner	Course A & E, and in general, many hard science MOOCs
Cognitive Constructivist Approaches	Constructivist approaches are based on subjectivism where there are multiple perspectives, interpretations and truths, and each has its own validity. Here, MOOC participants construct their own knowledge (independently) through activities and reflection and are actively involved in their learning and meaning-making process. Such participant-centred approaches make more use of action-based or inquiry-based learning than information delivery. ⁴³³	Jean Piaget	Course F
Social Constructivist Approaches	Stemming from constructivist presuppositions of subjectivism, social constructivist approaches further add that knowledge is socially and culturally constructed. Meaning is constructed through interaction with others and the environment. Intersubjectivity within the MOOC cohort allows one's understanding to evolve through negotiation e.g. through discussion forums. This participant-centred approach places emphasis on social learning, experience-sharing and collaboration. ⁴³⁴	Lev Vygotsky	Course D
Socratic Approaches	Socratic approaches are based on the presupposition that truth exists independently of one's beliefs (similar to behaviourism) i.e. objectivism. Truth is however acquired through a dialectical process. Through dialogue, both the participants and MOOC instructors (i.e. the inquirer and the interlocutor) can unravel and discover truth, noting that this may not happen in one Socratic session. Participants are not dictated the truth or expected to unquestioningly embrace their MOOC instructors understanding of what is true.	Socrates	Course C

⁴³² Bichelmeyer and Hsu (1999) and Diaz and Bontenbal (2000) can be read to gain a more complex understanding on instructivist approaches.

⁴³³ Jonessen (1991), Bichelmeyer and Hsu (1999), and Kalina and Powell (2009) can be read to gain a more complex understanding of constructivist approaches.

⁴³⁴ Kalina and Powell (2009) and Daniels (2016) can be read to gain a more complex understanding of social constructivist approaches.

	Contemporary Socratic practice is more used as a tool for critical thinking than as a way to find <i>the</i> truth. ⁴³⁵		
Liberationist Approaches	Liberation pedagogy or critical pedagogy reject the idea that education can be politically neutral. The aim of liberationist approaches is to gain a critical consciousness through a process of mutual humanisation. This pedagogical approach seeks to transform relations of power which are oppressive, and which lead to the oppression of people. This is achieved through emancipatory education. Teachers are viewed as problem-posers and encourage students to use dialogical and reflective processes. This approach empowers students to become teachers of their teachers. ⁴³⁶	Paulo Freire	Course B
Connectivist Approaches	A fundamental shift that connectivists take is that learning can reside outside of ourselves (i.e. within an organisation or database). ⁴³⁷ Here the collective group is emphasised more than the educators or the participants. Connectivist approaches aim to utilise social networking technologies and views the participant as part of a chaotic, complex and distributed network. This ahierarchical form of learning aims to promote equity, participation and social connection. ⁴³⁸	George Siemens Stephen Downes	

Source: Author's own

⁴³⁵ Boghossian (2002, 2003, 2006) and Chesters (2012) can be read to gain a more complex understanding of Socratic pedagogy.

⁴³⁶ Aliakbar and Faraji (2011), Giroux (2011) and Freire (1970) can be read to gain a more complex understanding of critical pedagogy.

⁴³⁷ It should be noted that Connectivism is not accepted by all as meeting the definition of a learning theory. Kop and Hill (2008), Clarà and Barberà (2014) expand on this.

⁴³⁸ Siemens (2005), Downes (2008), Kop and Hill (2008), Clarà and Barberà (2014) and Goldie (2016) can be read to gain a more complex understanding of connectivism.

Despite different epistemic foundations, the pedagogical approaches are not mutually exclusive in practice; MOOC designers can and do use a combination of approaches⁴³⁹ or use different approaches to reach different pedagogical aims at different points in the MOOC. MOOC platforms, however, as discussed in Section 9.2.3, are designed with a particular pedagogical leaning which often guides MOOC designers to follow a specific pedagogical route unless the designers make an explicit attempt not to follow this route. This may be one reason that South African MOOC designers did not incorporate connectivist pedagogies in their MOOCs.⁴⁴⁰

Course F is an example of how *a MOOC may draw on different pedagogical approaches at different points*. The course uses videos and articles to deliver expert knowledge (instructivist), however experts are from different countries and share different perspectives, thus ‘one correct way’ is not implied in the content delivery. As a big part of the course is evidence-based, and provides framework and analytical skills, correct understanding of the theories and concepts covered are tested through quizzes (instructivist). In other parts of the course, participants are encouraged to reflect through applying it to their own context (constructivist). This is then peer assessed which encourages learning from one another as well as empowering the participant in the role of an assessor (social constructivist). The course fitted well with Coursera’s pedagogy, as it used a competency-based approach and built upon knowledge learnt in previous weeks (linear progression). Course F’s combined pedagogical approach is not unique, and if anything has become the more common MOOC format.

While Course C and D appeared similar in nature in that it encouraged participation and social learning, there were subtle differences in the pedagogical approaches. Course C, whose purpose was practical, actionable and grounded, focused on sharing ideas and experiences between difference contexts. The purpose was to learn from each other’s diverse experiences. Course D was more philosophical in nature and while it also encouraged knowledge sharing, there was a greater emphasis on critical engagement, providing arguments and counter-arguments. Thus, while both dealt with inclusivity in education, Course C focused on the material injustices and Course D focused on the epistemic injustices. Thus, *their differing purposes led them to slightly*

⁴³⁹ Additionally, there are many derivatives of these approaches such as culturally responsive pedagogy, feminist pedagogy or queer pedagogy which will not be unpacked here.

⁴⁴⁰ This is not to say that connectivist pedagogies cannot be used in conjunction with these platforms, but rather that MOOC designers would need to make *considerable effort*, and use networks outside of the platform, in order to make a connectivist MOOC. One example of this is the EDCMOOC run by the University of Edinburgh on Coursera that adopts a hybrid pedagogy i.e. it incorporates connectivist approaches onto the Coursera platform (Ross et al. 2014).

different pedagogical approaches; Course C being more social constructivist, and Course D using more Socratic pedagogy.

Of the six justice-oriented MOOCs chosen in Table 9-9, none of them were from the hard sciences. This is not to imply that hard sciences MOOCs cannot be justice-oriented, but rather that being justice-oriented is defined here (according to the DoHI) as including a multiplicity of ways-of-knowing and ways-of-being. As hard sciences tend to be based on objectivist approaches to knowledge, it seems that almost by definition they are excluded from being justice-oriented as they do not align with constructivist philosophies. Here it is useful to point out Socratic pedagogical approaches that combine a behaviourist philosophy, i.e. that there is an objective reality, yet go about seeking this objectivist reality through dialectical interactions with an interlocutor. In this approach, those from the hard sciences can strive towards discovering this objective reality, yet dialectically involve *different participants from different cultural backgrounds and epistemological framings* that can contribute to the topics in new and interesting ways. This can help to bring in new perspectives on ethical or environmental concerns in the hard sciences.

9.5.4 Participation

Through the six justice-oriented MOOCs outlined, as well as others that were reviewed, various forms of participation were determined. These interactions are highlighted in Table 9-12.

Table 9-12 Types of interaction

Interactivity	Instances	Type of Interaction
Peer assessment/review	This type of participant interaction was exhibited in Course D and F. It is built into the courses as a formal activity. Participants write essays and then assess each other's work. Course D, on FutureLearn did not mark the assignment but focused on sharing ideas and experiences. While Course F also sought to share experiences, a marking rubric was provided to evaluate the writing piece.	Participant-participant
Prompted forum discussion questions	Course C, D, and F used this type of interactivity as a formal step in course. In Course F (on Coursera), the MOOC instructor asked participants to simply reflect on the week's lessons. In Course C and D (on FutureLearn), MOOC designers prompted participants with a thought-provoking question to encourage discussion. The latter tends to provide more stimulating discussion. Forum discussion can sometimes work well or sometimes lead to many single comments being made with no further interaction.	teacher-participant and participant-participant

Q & A Sessions	One of the courses reviewed offered weekly Question and Answer mini-podcasts where the participants are able to submit questions, and a few are selected and discussed. This helps to make the MOOC more tailored towards the current cohort and their queries. Having these as podcasts, as opposed to live webinars, reduces the visual component but accounts for those with poor connectivity and time zone differences.	teacher-participant
Facebook pages	Course C and another reviewed MOOC mentioned the use of Facebook pages. This type of interaction may be participant-led, or MOOC designer led and occurs beyond the formal course. While Facebook is used for sharing and commenting, it is used mainly to form a community of practice. Interesting material can also be posted from participants and MOOC designers.	teacher-participant and participant-participant
WhatsApp groups	Course E exhibited an organic, participant-led group formation on WhatsApp, outside the formal course. One possible reason is that the instructivist pedagogical approach of edX perhaps did not suit the topic and the participants needs. The WhatsApp groups allowed for in-depth, informal conversation beyond edX's formal and rigid structure. Groups formed based on some commonality such as region.	Participant-participant
In-person learning groups	Course C and another reviewed MOOC assisted in creating in-person learning groups as part of the course. Both of these courses were aimed at target groups from marginalised backgrounds. In other cases, MOOC designers were contacted by institutions from other countries for approval to run in-person sessions in their regions with the content.	Participant-participant

Source: Author's own

Within participation, there are different levels from single knowledge exchanges, to iterative exchanges, to co-creation of knowledge. Peer review/assessment allow for single knowledge exchange, but this is not enough for co-creation of knowledge. Going down the list in Table 9-12 shows methods that are increasingly favourable to co-create knowledge. In the reviewed MOOCs, in-person learning groups were most useful for justice-oriented aims that cater to marginalised groups, as they included those that may not have ordinarily had the means to join a MOOC (due to lack of resources, poor connectivity, or low digital literacy skills). This is not to say that the best form of knowledge co-creation can only happen in person; on the contrary,

virtual networked learning can be a catalyst for knowledge exchange (Mackness and Bell 2015; Ross et al. 2014).⁴⁴¹

In the South African case, however, connectivist pedagogies such as learning through sharing tweets and blogs were not specifically encouraged by the MOOC designers or the platforms,⁴⁴² nor initiated by participants (such as in the case of WhatsApp and Facebook groups).⁴⁴³ Here the difference between networks and communities is highlighted, of which, both MOOC designers and learners of the reviewed MOOCs preferred communities. Downes (2007) was explicit in differentiating between networks and groups. Networks emphasise *associations* between nodes. It is neither the individual nor the group, but the connection (ibid.). Groups or communities refer to a collection of members that have some shared purpose or nature (ibid.). While networks are a feature of connectivism,⁴⁴⁴ communities can form in both xMOOCs and cMOOCs (Kop, Fournier, and Mak 2011; Mackness and Bell 2015). Courses C and D which incorporated social constructivist pedagogies through encouraging peer-to-peer discussion are examples of this. These communities of practice are also useful to those from the hard sciences, as though they share different epistemological underpinnings, these communities can assist in accessing expertise that could not have otherwise be accessed. While some participatory practices link strongly with social constructivist approaches, practices that create communities, hubs and networks to engage with others, are useful to all.

Beyond critiques of connectivism highlighted in Section 2.4.4, another concern with connectivism is the emphasis on the use of social media and blogs. Participants may want to keep a low digital footprint or may not be comfortable with sharing their nascent views online for the world to scrutinise. Connectivist approaches can thus exclude participants in this way. One potential solution for this is the pseudonymous learning tools being implemented by designers in the Cambridge (Massachusetts) MOOC centres, as outlined by Bradley and Mike in Section 7.3.2.

⁴⁴¹ The EDCMOOC is an example of how tweets and blogs were used to share, collaborate, and co-create (Ross et al. 2014).

⁴⁴² As outlined by Matthew in Section 8.3.4, MOOC platforms also have a vested interest to centralise learning activities and discourage MOOC designers from going beyond the platform (whether Facebook, WhatsApp or Twitter), as they use participants' activity data on the platforms for learning analytics.

⁴⁴³ While twitter was used in some MOOCs, it was used for advertising by the university or to show excitement by the students. It was not used as a learning tool.

⁴⁴⁴ See Downes (2007) and Bates (2014).

9.5.5 Content

The content formats used by the MOOCs reviewed were conventional to most MOOCs; images, videos (including transcripts/captions or audio downloads), reading material and links to resources on other websites. One less conventional content format was podcasts, used in Course A and others. Through the different content formats, different types of content were relayed, namely; expert knowledge, cutting-edge research, theories, concepts, skills, case studies, provocations, reflections and personal stories. Types of reading material included summaries, articles, blogs and poems. A mapping of the content format and types to the six justice-oriented MOOCs can be seen Table 9-9.

In terms of visuals, Ranjeni emphasised the importance of creating charts and infographics that succinctly and graphically displayed information to aid participants understanding. In a similar vein, a handful of MOOC designers aimed to go beyond ‘talking head’ style videos, to filming on site at different locations relevant to their particular MOOC, e.g. classrooms, medical theatres or museums. The use of different types of presenters, such as experts, practitioners and students, helped to make the MOOCs more diverse, grounded, engaging and relatable.

Relevance of content was an important factor discussed in Section 8.2.1 in terms of tackling cultural-epistemic injustices. In that section, the extent to which content needed to be relevant to a particular context depended on the purpose and the target audience of the group. Nnenne, who was focusing on addressing the needs of marginalised groups in LMICs placed a heavy emphasis on local contexts. Priya, whose MOOC dealt with the complexity of identity aimed at a global audience, felt that focusing on one regional context only might serve to exclude those from other contexts. In such a case, the emphasis needed to be made pedagogically to include diverse voices and critical thought from the participants themselves. Here the difference between *justice-as-content* and *justice-as-pedagogy* was illustrated well.

Having said that, 13 of the 16 MOOCs that were reviewed in this study specifically referenced African or developing countries in their content in terms of examples, case studies, contexts, histories, knowledges, and/or scholarship.⁴⁴⁵ Similar to findings in Section 7.3, this shows how the location of the MOOC designers impacts the MOOC. This African focus allowed the MOOCs to bring new perspectives to Western-centric ‘global’ knowledge bases and also aligned with institutional rationales to market the university through showcasing local

⁴⁴⁵ In assessing more recent MOOCs that were produced in South Africa after my fieldwork phased, this trend is still apparent and even stronger.

knowledges and expertise to international audiences. However, there can sometimes be an over-emphasis on ‘Africanness’ *as a selling point*, while neglecting to cater for the needs and contexts of those living in resource-scarce environments in these countries. Thus, many of the MOOCs seemed to be *about* developing country contexts, but not *for* developing country contexts. A balance needs to be struck between using MOOCs to showcase African knowledges and contribute to the global knowledge base (i.e. addressing cultural-epistemic injustices) and using MOOCs to expand educational opportunities to marginalised groups (i.e. addressing material injustices).

9.5.6 Activities and Assessment

The differences in types of activities and assessments in various MOOCs linked to the pedagogical choices of the platform. In the FutureLearn courses reviewed, there was very little focus on formal critical thinking exercises or activities, save for a few simple quizzes; the focus was on discussion and interaction.⁴⁴⁶ For example, Course C and D made use of good prompting questions to open the weekly discussions. In the Coursera courses reviewed, exercises were used more, with complex automated testing. In Course F, for example, critical thinking and application of the content would be needed to answer the automated questions. Additionally, the course had writing assignments for marking through peer assessment. These types of activities fit Coursera’s cognitive constructivist approach. The courses reviewed on edX had quite a few creative automated assessments, such as drag-and-drop images, in addition to the usual multiple-choice type of questions.

Since the interviews were conducted, new South African MOOCs on edX have emerged with innovative exercises. One such example is an exercise from the ‘*Forced and Precarious Labor in the Global Economy*’ MOOC⁴⁴⁷ that uses an interactive chart to provoke thinking and discussion as no correct answer is given. This type of exercise, seen in Figure 9-5, in addition to many of the developments at the Cambridge MOOC centres discussed in Section 7.3.2, show an increased effort to use technological means to encourage critical thinking and improve learning. This also confirms that edX has been shifting from its instructivist pedagogical approach to a more cognitive constructivist approach.

⁴⁴⁶ The extent to which the discussion involves critical thinking depends on the purpose of the MOOC e.g. the difference between Course C and D outlined in Section 9.5.2.

⁴⁴⁷ This MOOC was developed after data collection and no interviews with the course designers were conducted.

Week 1 Activity:

Identifying the Root Causes of Forced and Precarious Labor (Part 1)

Taking effective action against forced and precarious labor requires a clear understanding of the underlying root causes which are behind global patterns of labor exploitation and vulnerability. This is not an easy task, since there are any number of factors which might be included here.

We ask that you assign a color to each of the factors identified below based on your assessment of their overall contribution to creating and sustaining forced and precarious labor. In future weeks we will ask you to revisit your original answer, and will also ask you to complete a similar exercise when it comes to thinking through different solutions and approaches. Any potential solution which fails to grapple with major root causes is unlikely to be effective.

* Click on the different factor blocks for additional information

COLOUR KEY

- Major Contribution
- Moderate Contribution
- Minor Contribution

Figure 9-5 Example of innovative exercise on the 'Forced and Precarious Labor in the Global Economy' MOOC

Source: Wits MOOC on edX (CC BY-NC-ND 4.0)

At present, none of the MOOCs in South Africa offer online degrees or diplomas.⁴⁴⁸ Monique highlights,

'I receive an incredible amount of emails asking me is this accredited with the NQF [National Qualification Framework], and I feel rather bad every time I say no it's not. So really an edX certificate is nice to have. It doesn't prove competence, it doesn't.'
(Monique)

This shows that there is a demand from South African MOOC participants to have accredited courses, which is different from the conceptions of MOOCs as a dip-in dip-out model.

9.5.7 Choices that suit the PMPs

In designing MOOC learning experiences for marginalised groups such as the PMPs, some of the basic tenets of MOOC instructional design need to be rethought, particularly how a MOOC

⁴⁴⁸ The 'Unbundled University' UCT MOOC on FutureLearn, which was created after my fieldwork, interestingly had accreditation by the Continuous Professional Development Certification Service. However, the MOOC is no longer running.

participant is envisioned. For example, Scagnoli (2012:1) highlights her understanding of a typical MOOC participants intentions:

‘In a MOOC, it is expected that participants that will come for information, not credentials. The goal is ‘pure education’ and the instructional design needs to consider the variations and provide space for those that come for the pure knowledge and leave, and also those that want to go further either in their education or in their learning.’

This assumption of the target group needs to be rethought in the case of the PMPs, who are unlikely to hold bachelor’s degrees and *are* looking for some sort of accreditation as accreditation unlocks employment opportunities (Section 5.4.3).⁴⁴⁹ This correlates with Monique’s experience (Section 9.5.6) of being asked repeatedly as to whether the MOOCs are accredited with NQF. The need for accreditation in order to find employment is not just so that they can earn. As highlighted in Section 5.4.2, PMPs overwhelmingly chose careers that were of societal benefit or that they had a particular interest and passion for. Thus, employment is seen as a way to contribute to society and pursue their passions as much as it’s a means to reach financial stability.

The PMPs pedagogical preferences were queried in the surveys before the online course was run: 71.9% of PMPs preferred learning ‘with a teacher to explain’ i.e. an instructivist approach, and 63.6% preferred ‘learning in a group’ i.e. a social constructivist approach (Section 5.5.3).⁴⁵⁰ In contrast, only 30.7% preferred ‘learning alone’, which is what is needed in self-directed learning and connectivist approaches. However, after the course, when asked whether learning the online content in a classroom environment added value, 63.7% stated that they learnt best from the online content alone, as opposed to a combination of online content and group discussions, or purely group discussions. PMPs may not have found group discussions as beneficial as the content because I did not provide structured group exercises (Section 5.7.6). This suggests that more guidance and direction need to be given in group activities. This is consistent with findings highlighted in Section 9.5.4 where prompted and guided discussions

⁴⁴⁹ In running the studies, the most frequent question that was asked was whether they would get a certificate, even though the certificate would hold no weight.

⁴⁵⁰ The question was not mutually exclusive; PMPs could select many preferred learning methods.

proved more beneficial than unguided discussion such as asking participants to simply reflect on the week.⁴⁵¹

PMPs lack of digital savviness and low self-directed online learning abilities, coupled with low internet connectivity and high data costs, make pure connectivist approaches a mismatch for the PMPs.⁴⁵² Liyanagunawardena et al. (2013) argues that participants from developing countries can be negatively impacted by the information overload, chaos and unstructured nature of horizontal connectivist pedagogies and that insufficient support can lead depress participants' motivation. Bali (2014) and Mackness et al. (2010) similarly highlight that the technological skills and autodidacticism needed in connectivist approaches limits its use. However, self-directed learning and learning through networks are important skills for the digital age (Kop and Hill 2008; Siemens 2005), and PMPs could slowly be *guided* into this style of learning. As highlighted in Section 9.4.5, once PMPs were slowly introduced to self-directed learning skills such as how to Google a word, they started doing this independently instead of asking someone else.

The need for in-person learning hubs due to low digital and internet literacies was highlighted in Section 9.4.5 and is further emphasised here when we take into account participants' pedagogical preferences for an in-person educator and peer interaction. The creation of in-person learning hubs to promote participation, highlighted in Section 9.5.4, also matches the needs of the PMPs who suggested having more non-digital activities, more small-group discussions and more educator-facilitated classroom discussions to internalise the content covered (Section 5.6.5). There was also a high dependence on the need for a facilitator to bring in expertise and manage class conduct. This indicates that in-person learning groups would benefit from having a few experienced individuals (technology and/or content-wise) to take leadership in the group. These in-person groups could utilise blended-learning, however, as highlighted in Section 5.2, the blended-learning approach used in the study did not work as planned due to participants' differing learning paces resulting in them being out of sync in the course stages.⁴⁵³ This suggests the need for a solution where participants can individually work

⁴⁵¹ In Bali's (2014) review of four Coursera courses, she similarly argued for instructors to pay more attention to stimulating discussion on the forums. Course C and D are examples of this as they emphasised prompting discussion, in line with FutureLearn's social constructivist pedagogy.

⁴⁵² This may have also been a reason for why South African MOOC designers, familiar with these contexts and barriers, steered away from using connectivist approaches.

⁴⁵³ I had planned to alternate between individual work and group discussion but some PMPs finished quicker and moved on to the next sections while others lagged behind. Thus, group activities did not happen. This resulted in 76.4% of the PMPs stating their preference to have more interactive activities (see Section 5.6.5).

at their own pace, and to the depth they desire, in a shared learning space (if they wish) where technical assistance can be gained from peers or a facilitator. Scheduled discussion times can be set so that participants can sufficiently prepare before critically engaging with others about the content. This solution would also support the diverging preferences of PMPs regarding doing an online course at home by themselves or in a community centre with others as it would cater to both preferences (Section 5.6.5).⁴⁵⁴ Furthermore, a community MOOC WhatsApp group to support each other through any difficulties could also be beneficial for motivation, speedier responses and technical queries. In addition to uses of WhatsApp highlighted in Section 9.5.4, other studies have shown WhatsApp emerging as a key tool in distance education learning in South Africa, for example by UNISA students, thus the potential of WhatsApp needs to be explored further (Madge et al. 2019).

In environments where digital devices are few, MOOCs do not need to be done by each participant on separate devices. One device and connection could be used for a whole group, and the content could be explored together.⁴⁵⁵ This type of learning organically happened in Umgababa where PMPs did the course on their phones.⁴⁵⁶ The PMPs organically formed circles where they started going through the content and questions together. They sometimes huddled around one person's phone to watch a video together.

When asked to reflect on learning methods *after* doing the course, PMPs rated receiving test results and feedback through the automated questions the highest (See Section 5.6.4). This type of assessment is often criticised as lacking depth (Bali 2014; Costello, Brown, and Holland 2016), however, in scenarios where participants have very little teacher feedback due to large classroom sizes, such a feature of instant feedback, whether for trivial or complex questions, is quite gratifying and beneficial.⁴⁵⁷ The gamified nature of these automated assessments also makes them fun. However, noting that PMPs sometimes began byhearting the answers, more complex forms of assessment are also necessary.

⁴⁵⁴ In Section 5.6.5, 56.1% of participants indicated preferred to do another online course in a community centre with others while 41.5% preferred to do it alone. From observations in the study, my understanding is that those who preferred to do it alone felt slowed down by the pace the class was moving.

⁴⁵⁵ This suggestion would not be favoured by MOOC platforms trying to track participants learning habits, however, it is in line with more communitarian approaches to learning.

⁴⁵⁶ This was also highlighted by Nnenne in Section 8.3.5 who approached principals of schools to set up learning groups.

⁴⁵⁷ Prompt feedback in MOOCs was also outlined by Bali (2014) as good practice, drawing on Chickering and Gamson's (1987) seven principles of good practice in undergraduate education and Blooms Taxonomy.

PMPs also shared suggestions and gave feedback about the content formats they preferred. Regarding videos, the PMPs had mixed feelings due to the videos not working properly (Section 5.6.4). Videos did not work properly due to YouTube being blocked, slow internet or lack of earphones to listen to the sound. This frustrated them and thus watching videos was thus rated the lowest learning aspect in the course they took. However, when asked if they preferred more videos, 76.9% responded positively, implying that they wanted the quality of videos to improve rather than for videos to be reduced. They were also not used to sitting in front of a computer for long periods of time and found reading exhausting, particularly for those with eyesight problems (Section 5.6.5). Thus, in addition to MOOC designers focusing on the content and style of the video (Section 9.5.5), its format and usability in low-resource contexts is an equally important design consideration.

Regarding contextual relevance of education, many PMPs highlighted ways in which Western knowledges were prioritised over African knowledges in their education (See Section 6.6). PMPs specifically highlighted a lack of African history and thinkers from their education, and to this, content such as that in Course A and B are particularly useful in filling in the gaps.⁴⁵⁸ PMPs also mentioned that African ways of teaching were neglected, and for that, topics like those in Course D address these different philosophies and approaches to teaching and learning inclusively.⁴⁵⁹

Regarding broader educational experiences, PMPs shared that they faced racial discrimination in their educational environments and subordination of their cultures in their educational experiences (Sections 6.3 and 6.4). Formalised education, with curriculum and reading lists as its aid, dictate what counts as knowledge and what does not (Illich 1971), and PMPs indigenous knowledges and ways-of-being were not included in this formal education. For example, when PMP were asked to share local knowledges, they did not refer to books by African scholars and philosophers, but local, traditional rituals, dance and music (Section 6.4.3); these are the embodied local knowledges that are not transferable through textbooks and lectures but are experienced and lived. This draws on Section 7.4 which calls to embrace more embodied, kinaesthetic ways of learning. PMPs felt a disjoint between how they are at home and what their home beliefs, values and norms are, versus who they are taught to be at school and what they are taught in school (Dei and Simmons 2010). They felt the need to culturally assimilate

⁴⁵⁸ Course A and B however are very reading heavy – even for the undergraduates they are designed for – and would need to be simplified much further to be useful to the PMPs.

⁴⁵⁹ Course D, however, is not very accessible, technology and vocabulary wise, to marginalised groups.

to fit into the institutional culture. These sorts of issues cannot be resolved through content, or pedagogy for that matter,⁴⁶⁰ as these issues lie outside of the formal learning environments. Thus, presenting decolonial thinking in academized ways, such as in Course A and B, still keeps PMPs feeling disjointed from their home cultures. Here, we see the difference between a course being *about* decolonial discourses, versus *from* decolonial practices that would *incorporate* different ways-of-being and ways-of-knowing. As MOOCs can ‘*go to places*’ and ‘*see the sights*’ (in the words of Ranjeni), they have the potential to showcase and include different ways-of-knowing and ways-of-being such that the world in its diversity is the learning space, rather than the virtual classroom; this is a feature of MOOCs that has not yet been harnessed enough.

9.6 Conclusion

This chapter drew together findings from previous chapters to consolidate the decisions and practices of MOOC designers in different stages of the MOOC design process. I highlighted decisions and practices that contribute to designing justice-oriented MOOCs, with a specific focus on how one would design to reach marginalised groups such as the PMPs. I illustrated that *there is no one-size-fits-all framework* for designing justice-oriented MOOCs, but that this depends on *the MOOC designers’ and MOOC’s philosophical underpinnings, the purpose, and the envisioned target group*. Four decision-making spheres in MOOC design were outlined.

The first sphere outlined the institutional framings of MOOCs, emphasising the rationales that South African universities had in investing (or not investing) in MOOCs. I outlined factors that guided or limited institutions in choosing MOOC platforms. I also highlighted the differences in the platforms, particularly in terms of pedagogy and technological features. The institutional rationales for MOOCs and the choice of platforms were highlighted as they influence and frame many later decisions in MOOC design.

The second sphere discussed the conceptualisation of the MOOC. Drawing on Chapter 7, I emphasised the importance of diverse design teams that draw on a range of expertise and epistemologies. As MOOC designers’ subjectivities and viewpoints impact the philosophical underpinnings of the MOOC, I argued that MOOC designers need to examine and make explicit these philosophical underpinnings so as to not perpetuate cultural-epistemic injustices.

⁴⁶⁰ This subtlety is seen when comparing Freire and Illich. While Freire’s (1970) critical pedagogy still upholds the educational system, Illich (1971) sought to dismantle the formal education system through deschooling society.

I showed that MOOC designers' identities further influence the purpose of the MOOC and the envisioned target group. Various purpose-focused categories of MOOCs as well as types of target groups were outlined, and I illustrated that these are often strongly connected. I showed that a MOOC can strive towards justice-oriented purposes yet not be targeted at marginalised groups. However, some purpose categories such as gateway or vocational skills can directly support marginalised groups. The need for MOOC designers to be explicit in who their target groups are, as well as the background knowledge needed to best benefit from the MOOC, was emphasised. The diversity of participants in MOOCs was also illustrated as a point to be leveraged on, to benefit from knowledge exchanges between different cultures, contexts, and fields of study.

The third sphere discussed situating the MOOC in its societal, political, environmental and socio-technological contexts. I illustrated ways in which technological accessibility could be improved to remove these barriers to access. Language barriers, however, proved far more complicated and the need for MOOCs in local languages was shown to conflict with the concept of massiveness. Through drawing on Keddie's (2012) differentiation between simply providing access to learning and resources, versus assisting learners who are not equitably positioned to access these resources, this sphere emphasised *the need for more learner support* and in MOOCs. A shortfall in the MOOCs reviewed was the lack of concerted efforts to raise awareness and advertise to MOOCs to marginalised groups, thus more non-digital advertising beyond existing communities was emphasised.

The last sphere discussed constructing and implementing the MOOC. In highlighting six justice-oriented MOOCs, it was shown that institutional rationales, philosophical underpinnings of MOOC designers and MOOCs, purposes, and envisioned target groups as well as their contexts, all influence the construction of the MOOC. These impacted the MOOCs power dynamics, pedagogical approaches, types of participation, choice of content, activities and assessment. The review of South African MOOCs showed two further power dynamics in MOOCs, that of top-down management decreed MOOCs, and that of ground-up student led MOOCs. In terms of pedagogical approaches, it was shown that the MOOCs reviewed had shifted away from the rigid instructivist xMOOC and connectivist cMOOC dichotomies to show a diversity of hybrid pedagogical approaches that exist between these. Notably, connectivist pedagogies were not featured strongly although formations of closed digital communities organically arose from participants' initiatives through WhatsApp and Facebook

groups. Different participation approaches were highlighted with varied levels of interaction and opportunity for co-creation of knowledge. Throughout the examples, it was shown how MOOC designers sought to bring justice into their MOOCs in different ways through *justice-as-content*, *justice-as-pedagogy*, or *justice-as-process*. Caution was raised to find a balance between addressing cultural-epistemic injustices through promoting local knowledges globally and addressing material injustices through providing educational opportunities for marginalised groups; currently the South African MOOCs are placing emphasis on the former, in line with their institutional rationales for MOOCs.

This conclusion consolidates MOOC designers' attempts in striving towards justice-oriented MOOCs. The extent to which these practices address the needs of the peri-urban marginalised South African MOOC (the PMPs) is summarised in Chapter 10 where the overarching research question is directly answered, and the thesis is concluded.

10 Conclusion

In the context of high inequality in South Africa and a national conversation around the need to decolonise education, this thesis sought to investigate the potential of MOOCs, particularly South African MOOCs, to support the educational needs of peri-urban, marginalised groups and address the injustices they face. Embodied cognition theory, critical pedagogy, the capability approach, social justice theories, and decolonial discourses were drawn on conceptually and analytically to investigate the topic. This chapter synthesises the main arguments and concludes the thesis. I summarise findings from each of the four research sub-questions and the overarching research question, outlining contributions to knowledge and areas for further research.

10.1 Responses to Research Sub-questions

Research sub-question 1: *What are the needs, preferences, and aspirations of the marginalised, peri-urban youth in South Africa, specifically regarding education and technology?*

Research sub-question 1 was responded to in **Chapter 5**, which sought to understand the lives of PMPs through using the capability approach i.e. asking them what they have reason to value in their lives. I ascertained a better understanding of their lived experiences, living conditions, difficulties, needs, preferences and aspirations, particularly regarding education and technology. PMPs highlighted that the biggest difficulties they faced were insufficient finances and lack of quality education. They desired more hands-on experiences in education, however, there was little mention of critical thinking and character building in the education they envisioned. Finding employment was their greatest need and many PMPs saw it as a way to serve their communities as much as to gain financial stability. PMPs highlighted various academic and vocational fields of study they wished to pursue. Their access to technology was also ascertained, where mobile phones were far more prevalent than computers. Computer literacy ranked highly as a desired skill to learn for employment, however, technological aspects ranked as less essential among other aspects of a good life. Survey results after the online course was run indicated that PMPs preferred more non-digital group interaction as well as guidance from an educator.

This chapter contributed to knowledge as it is the first study⁴⁶¹ aimed at understanding the online learning needs, preferences, and aspirations of marginalised groups in South Africa from the marginalised groups themselves.

Research sub-question 2: *How do historical injustices, particularly colonialism, apartheid, and their legacies, impact the education of marginalised peri-urban youth in South Africa?*

Research sub-question 2 was responded to in **Chapter 6**, which investigated the impact of apartheid and colonialism on the lives of PMPs. Participants highlighted inequalities in the quality of schooling between historically-white and historically-black areas as well as the lack of inter-generational wealth to assist them in breaking the poverty cycle. They mentioned how coloniality impacted their identity, where they were made to feel inferior to others. They shared many stories of racial discrimination, not only between black and white people, but also between tribes and classes. Within their education, they highlighted how Western knowledges were prioritised over their local knowledges, and had mixed views on the language they wished to be taught in. Despite the racism faced in schools, many PMPs were open-minded about the race of their educator, emphasising instead their personality and pedagogy, above their race. Differences between the PMPs' and black university students' opinions were highlighted where the former was much more focused on material injustices, more conscious of inter-tribal prejudices, and less concerned with the race of their educators.

This chapter contributed to knowledge as it is the first study⁴⁶² to investigate the opinions of predominantly non-university students regarding their views of the need to decolonise education and the injustices they experience(d) in their education.

Research sub-question 3: *What is the impact of a MOOC designers embodied, distributed, situated cognition on their understanding and enactment of openness in MOOCs?*

Drawing on embodied cognition theory, research sub-question 3 was responded to in **Chapter 7**, where the embodied cognition of MOOC designers and its impact on the epistemological foundations of MOOCs were investigated. I illustrated that MOOC designers create MOOCs

⁴⁶¹ This was ascertained through numerous searches on Google scholar using keywords 'online learning', 'marginalised', and 'South Africa' (and their synonyms). The most similar studies that appeared focused on ICT provision or adoption in marginalised areas in South Africa (Akinsola, Herselman, and Jacobs 2005; Herselman 2003; Mapi, Dalvit, and Terzoli 2008), which did not look at online or digitised learning. Other studies focused on online, e-learning or distance education in higher education that did not focus on marginalised groups (Bharuthram and Kies 2013; Damoense 2003)

⁴⁶² Existing studies, such as Swartz et al. (2018), focus on university students' views on decolonising education.

that strongly link to who they are, what they value, and how they understand the world, highlighting the crucial need to have epistemically diverse MOOC Designers from different cultures, value systems, and epistemological framings, that critically reflect on their positionalities and subjectivities. Through a comparison between South African MOOC centres and Cambridge MOOC centres it was shown that the institutional culture and socio-technological contexts in which MOOCs are created impact the ethos and design of MOOCs.

This chapter contributed to knowledge though empirically illustrating how epistemically diverse MOOC designers contributed to broadening understandings of openness. From this, it introduced the concept of *openness-as-embodiment*, where OEPs move beyond something extrinsic that is *done* to make something open, to something more intrinsic: to *be* someone that is more open. Lastly, it argued that MOOCs are designed *from* their contexts, thus MOOC centres need to be conscious of the institutional culture and surrounding contexts that may be implicitly embedded into their MOOCs.

Research sub-question 4: *What are South African MOOC designers' conceptualisations of justice and how do they attempt to address these injustices in and through their MOOCs?*

Responding to sub-research question 4, **Chapter 8** looked at the ways in which South African MOOC designers conceptualised and aimed to address injustices in and through their MOOCs. MOOC designers, shaped by their opinions on social justice and decolonial discourses, placed emphasis on addressing particular forms of injustice. Those who emphasised on overcoming cultural-epistemic injustices, focused on relevance, knowledge production, inclusive processes and language choices. Those who focused on material injustices, focused on economic disparities, resource and infrastructural inequalities, technological barriers, and the need to address these systemic problems at a societal level. I argued that a multipronged approach is needed to tackle the entangled and reinforcing injustices that marginalised groups face.

This chapter contributes to knowledge as it is the first study⁴⁶³ to investigate MOOC designers' conceptualisations of justice and practices that serve to address injustices in and through their MOOCs.

⁴⁶³ This was ascertained through a search on Google Scholar using the terms 'MOOCs' and 'justice'. Studies on accessibility and inclusivity arose (many of which are cited in Chapter 2), but none that explicitly focus on (in)justice. No existing study was found which examined MOOC designers' conceptions of justice or justice-oriented practices.

10.2 Response to Overarching Research Question

Chapter 9 consolidated the decisions and practices of MOOC designers that contributed to designing justice-oriented MOOCs. Main findings were that there is no *one-size-fits-all framework* for designing justice-oriented MOOCs. Rather, justice-oriented MOOC design depends on *the MOOC designers' and MOOC's philosophical underpinnings, the purpose, and the envisioned target group*. It was shown that MOOC designers bring justice into their MOOCs in different ways; *justice-as-content, justice-as-pedagogy, and justice-as-process*. The latter approach proved most inclusive. The main caution raised in the chapter is the usage of 'Africanness' as a marketing tool, whereby MOOCs can be *about* developing country contexts, yet not *for* developing country contexts.

This section focuses specifically on designing justice-oriented MOOCs for the marginalised, peri-urban South African youth to summarise findings that respond to the **overall research question:**

To what extent do or could MOOCs, particularly those produced in South Africa, support the educational needs, preferences, and aspirations of marginalised, peri-urban South African youth and address the material, cultural-epistemic, political, and geo-political injustices they face?

As MOOCs are not one monolithic category and are strongly influenced by MOOC designers' motivations (Chapter 7), this question is best answered by highlighting *certain features of MOOCs and particular practices of MOOC designers* that were found to be useful to supporting the PMPs and addressing the injustices they face.

10.2.1 Addressing material and political injustices

MOOCs do or could address material and political injustices in the following ways:⁴⁶⁴

General: PMPs highlighted lack of funds and unmet prerequisites as barriers to pursuing further education; MOOCs directly respond to both these difficulties as *they are free and do not have prerequisites*. In addition to being free, they can also be *done from anywhere*, reducing travel costs and the need to travel long distances to get to educational institutes, which were raised by PMPs as a barrier to accessing education. MOOCs are also flexible which supports

⁴⁶⁴ It is difficult to disentangle material injustices from political injustices in the South African context where much of the material injustices stem from the history of colonialism and Apartheid. They are thus presented together due to the irreducible complexity.

PMPs who are *working and/or raising families*. MOOCs may provide access to *quality content* which responds to one facet of the poor-quality education that PMPs raised as an issue.

Technological adaptations: 75% of PMPs owned a smartphone in comparison to 24.3% who owned computers, thus MOOC platform features that focus on *mobile compatibility* align strongly with the needs of the PMPs. Other useful *technological adaptations* that enable use in resource-constrained areas included ensuring videos were short, providing downloadable content and ZIP files with reduced data sizes, and providing transcripts for those who could not watch the videos. *WhatsApp*, which was organically used by some MOOC participants to create regional groups, would also support groups like the PMPs. Contrary to critiques of automated assessment, receiving *instant feedback* through quizzes was the most liked feature of MOOCs, and was shown to validate and motivate the PMPs who may not often get feedback in their learning experience. However, more complex ways of assessment and feedback are still necessary to assess whether participants deeply understand the topic.

In-person learning groups and technical support: Many PMPs emphasised that they pedagogically preferred *guidance and support* from an educator, as well as *learning with peers* and in a classroom environment. Furthermore, it was observed from running the online courses that those with low digital and internet literacy need a high level of *technical support* from the facilitators or peers. Although only a few MOOC designers placed emphasis on creating in-person learning hubs, their efforts proved quite successful in supporting marginalised participants. Creation of in-person learning hubs, similar to those of P2PU, would be key to supporting groups like the PMP in utilising MOOCs. The envisioned hubs would accommodate independent learning in a shared space as well as scheduled group discussions. This would allow for differently paced learners to use their time accordingly. Working together would provide participants with technical support and motivation.

Gateway MOOCs: PMPs highlighted a lack of academic support and career guidance. *Gateway MOOCs* respond directly to this need as they provide a taster into a particular field as well as a taster of what learning at university will be like. Currently, however, very few Gateway MOOCs exist in South Africa and this could be one way to utilise MOOCs to support South African marginalised groups as these types of MOOCs are in line with institutional rationales for MOOCs. Furthermore, Gateway MOOCs could be used as a way to earn entry credits into university programs for students that do not have the prerequisites to enter.

Community MOOCs: PMPs mentioned various *difficulties faced in their communities* from drugs to mental health to sexual abuse. Responding to such pertinent issues would fit the universities' rationales for MOOCs as well as serve the needs of local groups like the PMPs, however no MOOCs currently exist in this space. A new category of MOOCs is envisioned here called 'community MOOCs' which are MOOCs that package information to equip marginalised groups with dealing with issues they face in their communities. Many of the issues they face e.g. neighbourhood drug issues or mental health difficulties are relevant to many around the world thus these MOOCs may be locally specific but globally relevant.

Awareness and advertising: Despite all the ways in which MOOCs designers have attempted to include marginalised groups, the main barrier to access is because *marginalised groups are not aware of MOOCs*. This inhibits marginalised groups from the opportunity to take MOOCs. When the PMPs were introduced to the concept in the studies, many of them were interested but required further information about what it is. From the side of MOOC designers, *little effort has been made to advertise* to these marginalised groups. MOOC designers could better advertise MOOCs to marginalised groups through posters, community centres, local NGOs, local community WhatsApp groups, local radio and local TV stations as opposed to depending on the MOOC platform advertising, or advertising through the universities existing communication channels.

10.2.2 Cultural-epistemic and Geopolitical injustices

MOOCs do or could address cultural-epistemic and geopolitical injustices in the following ways:⁴⁶⁵

Language: Feedback from the surveys indicated that PMPs desired to learn in English and thus MOOCs designed in English support their preferences. However, PMPs struggled to fully understand all the words in the online course and this indicates that they may need more support with English MOOCs. For this reason, including captions is key, as done by many MOOC designers. In regions like Limpopo and KwaZulu Natal where *one predominant local language* is spoken, PMPs struggled more with English. Thus, for these regions, voice overs or subtitles in local languages would be beneficial. However, as MOOCs strive for global reach, massiveness is often at odds with catering to particular local languages.⁴⁶⁶ In regions like

⁴⁶⁵ Like Section 10.2.1, it is difficult to disentangle cultural-epistemic injustices and geopolitical injustices as much of cultural-epistemic injustices are as a result of coloniality.

⁴⁶⁶ In some cases, MOOCs have been translated to local languages by local community members who understand English.

Gauteng where there is a plethora of languages, English is better understood as a common language and having subtitles in select local languages might actually be divisive.

Relevance: PMPs shared how their formal education felt disjointed from their home lives. MOOC designers that focused on including marginalised groups, voices and experiences sought to address this concern by including more *relevant content*. Relevant education implies education that is relevant to people's daily lives as well as their social, political, environmental and technological contexts. However, for most MOOCs which are global-facing, participants are extremely diverse, and content cannot be relevant to all. In these cases, some MOOC designers sought to bring in relevance and diversity pedagogically through encouraging interaction and sharing rather than through content.

Including different ways-of-being: While some MOOCs explicitly focused on promoting the works of decolonial scholars, activists and intellectuals, they didn't quite capture decolonial ways-of-being. Drawing on how PMPs felt their cultural beliefs and practices were sometimes discriminated against and thought of as 'uncivilised' in their education, a crucial difference of courses being *about* decolonial thought versus courses *incorporating* decolonial ways-of-being was noted. Local knowledges to the PMPs referred to their lived experiences such as their traditional rituals, dances and belief systems, rather than African scholars and activists. Given the visual component of MOOCs and their ability to go beyond the walls of the classroom, MOOCs have a potential to embody a plurality of ways-of-being more than any other educational model has before.

Partnerships and co-creation with communities: Some MOOC designers sought to build partnerships with local NGOs and community groups. Partnerships and community engagement are useful in ensuring that the purpose and content is grounded, practical and relevant to the local group. It enables the community's perspectives and experiences to be included in the MOOC design process *from conceptualisation* thus striving for *justice-as-process*. Furthermore, working through partnerships helps to advertise the MOOC, guide in language considerations, and assist in distributing the content to places where it is not technologically accessible.⁴⁶⁷

⁴⁶⁷ For example, content may need to be downloaded and distributed physically to community members in resource-constrained areas.

10.3 Limits and Possibilities of MOOCs in South Africa

Beyond global appeal often taking precedence over local relevance in particular MOOCs, MOOCs *overall* were unable to meet PMPs in two crucial ways. Firstly, many PMPs sought education for employment, particularly *vocational skills, computer skills and soft skills*.⁴⁶⁸ However, none of the universities reviewed provided such MOOCs and it does not align with these universities' expertise or rationales for MOOCs so it is unlikely they would invest in such MOOCs. Secondly, beyond access to knowledge, PMPs wanted *accreditation*, as a qualification is needed to improve their employability.⁴⁶⁹ None of the universities reviewed offer credits or degree programmes with their MOOCs; they all have separate online degree programmes which are quite expensive. Thus, it is unlikely that their MOOCs will become accredited.

A possible solution to better support PMPs needs, preferences and aspirations is to rethink the major players in the South African MOOC space, which are currently four top academic-focused universities and three global-facing MOOC platforms. A re-envisioning of the MOOC space with partnerships between TVET colleges or distance education universities like UNISA who *do* specialise in vocational education,⁴⁷⁰ and platforms such as Alison (who focus on vocational online courses) and P2PU (who focus on local human support for online courses), may better address the needs of peri-urban marginalised groups. Despite South Africa's history with distance education, e.g. through SACHED and UNISA who have played a crucial role in providing equitable educational opportunities to marginalised groups (Section 2.2.3), the South African MOOC space has drawn very little from this. Furthermore, UNISA is shifting to an Open and Distance e-Learning (ODeL) model⁴⁷¹ which suggests that that MOOC-like initiatives from the university may increase (Ngubane-Mokiwa and Letseka 2015).⁴⁷² Caution, however, should be taken that vocational education is not the *only* focal point.⁴⁷³ A balance needs to be struck between responding to PMPs *needs* for more vocational

⁴⁶⁸ This is said noting that they often wanted employment that would serve to society's benefit in addition to earning an income.

⁴⁶⁹ This highlights a difference from the uses of MOOCs in the Global North where MOOCs users are likely to have or be pursuing a bachelors' degree and do not need any accreditation from the MOOC.

⁴⁷⁰ UNISA focuses on both vocational and academic education.

⁴⁷¹ Previously they had been using an Open Distance Learning (ODL) model.

⁴⁷² Goosen (2015, 2018) is the only source to be found regarding one MOOC from UNISA. This MOOC could not, however be found online to be reviewed.

⁴⁷³ In Section 5.4.3, only two participants mentioned the need for more critical thinking and only two participants mentioned the need for character building in education. Their main educational needs were for their education to provide skills which will support them in finding employment and for it to be relevant to their lives. This shows

education and creating emancipatory educational experiences whereby they can ‘take action against the oppressive elements of reality’ (Freire 1970:17).⁴⁷⁴

In their current instantiation, SA MOOCs are unable to address the structural problems built into the South African education system as a result of historical injustices (Section 2.2). For MOOC initiatives in South Africa to make a structural impact in supporting marginalised groups, government backing is needed in the same way that the Government of India has invested in MOOCs there. The Indian Government has developed the SWAYAM platform which offers locally produced MOOCs from high school to post-graduate level (Samanta 2018). They have various physical examination centres across the country to accredit MOOCs and have recently launched e-degrees (Saraswathy 2020).⁴⁷⁵ A possible solution to address the high demands for higher education in South Africa would be for the South African Government to partner with UNISA and TVET colleges to offer ODeL MOOC-like accredited courses. However, there are concerns that the shift to ODeL is *moving away* from supporting marginalised groups (Ngubane-Mokiwa and Letseka 2015),⁴⁷⁶ thus further research needs to be done to investigate firstly, the feasibility of such partnerships, secondly, whether such an ODeL-MOOC combination would in fact support the needs of the marginalised, and thirdly, how such a model could be built *for* resource-constrained contexts factoring the socio-economic inequalities of South Africa *into* its model.

10.4 Overall Contributions of the Thesis

Overall, this research has contributed to knowledge in numerous ways. Firstly, it has contributed to literature on MOOC *production* from Africa, of which there is very little, relative to literature on MOOC production from the USA and UK. Secondly, it has contributed to literature about *potential* MOOC participants, rather than existing participants, which has not

that a purely ground-up approach that only responds to PMPs needs and requests, may not provide a holistic solution.

⁴⁷⁴ In Section 3.5.3, Mamdani (2019:20) critiques education that is solely focused on local market needs without focusing on producing ‘reasoning graduates’. PMPs need vocational education to meet their immediate financial needs and survive in a neoliberal capitalist order. However, to challenge the system of oppression, they need education that encourages critical thinking and decolonising of the mind (Freire 1970; Thiong’o 1986). Thus, the capability approach was useful for illuminating their needs for vocational education (Chapter 5), and the Dimensions of Human Injustice Framework was useful for drawing attention to the injustices they face (Chapter 6), which can, in part, be addressed by providing a more liberating education.

⁴⁷⁵ Swayam 2.0 was launched in January 2020 by the Ministry of Human Resource Development. The new version will focus more on assessing learner performance and have local mentors to guide students. The fee structure will depend on the university hosting the e-degree (Saraswathy 2020).

⁴⁷⁶ Ngubane-Mokiwa and Letseka (2015:1) argue that the move from ODL to ODeL does not take into account South Africa’s socio-economic context where the majority of the country is still largely ‘rural, communal, invariably poor and excluded from the broader benefits of modern electronic technologies’.

been done before. No research on MOOCs has yet to take the approach of *first* seeking to understand educational needs and online learning preferences of a marginalised group to design MOOCs, or adaptations of it, *for* marginalised contexts. Thirdly, this research took a human-centred approach as opposed to a tech-centred approach⁴⁷⁷ evident in much MOOC research. Through doing so, it has emphasised the role and the importance of MOOC designers and furthermore, the importance of epistemically diverse MOOC designers. Fourthly, it is the first study to empirically focus on addressing injustices in and through MOOCs. Beyond a contribution to knowledge, this serves as a practical guide to MOOC designers endeavouring to design justice-oriented MOOCs as it outlines various factors and decisions to consider in various spheres of MOOC design. Finally, the Dimensions of Human Injustice Framework, which draws upon various theories of (in)justice originating from the Global North and Global South, was proven to be a valuable tool for analysis of injustices through the dimensions of material, cultural-epistemic and political/geopolitical injustices. Its application is useful beyond MOOCs or education spaces.

10.5 Limitations and Further Research

In addition to the need for further research which looks into UNISA's ODeL implementation and how MOOC models might fit into it, there were limitations in this study which provide avenues for further research. Three suggestions are highlighted. The first relates to investigating mobile phone and tablet usage for online learning. Due to the concern that participants would not have digital devices, I conducted the study on computers. However, it was found at the Umgababa fieldwork site that online courses could be done on mobile phones. Furthermore, this research did not investigate the use of tablets for taking online courses. Tablets have been particularly popular in ICT4D projects and have proven to be more popular than computers (Haßler, Major, and Hennessy 2015). They strike the balance between a decent screen sizes for learning (in comparison to mobile phones) and affordable prices (in comparison to computers). Further research is needed on the use of mobile phones and tablets to pursue MOOCs, or adaptations of it, in marginalised contexts.

The second is that this research categorically focused on peri-urban regions where there is access to electricity and internet, albeit erratic. Rural parts of South Africa do not have the same levels of access to infrastructure, are far poorer, and less likely to speak English. While

⁴⁷⁷ Within much of MOOC literature, the 'disruptive' nature of MOOCs is often promoted, whereby technology is portrayed as the saviour to the broken education system (Section 2.5.1).

this study illustrated many ways in which MOOCs could support peri-urban youth, the possibility of MOOCs being beneficial to rural youth requires a different study, where findings are likely to be less optimistic. Furthermore, research into how technological progress in urban parts of the country may exacerbate inequalities in rural parts is needed.

The third is that a pragmatic approach was taken in this research where neither MOOC platforms nor universities were seen as philanthropic or pursuing education as a public good. Thus, suggestions were only made if they aligned with the universities' rationales for MOOCs or benefitted the universities in some way. In this way, the suggestions made worked *within the frame of a neoliberal education system*, as opposed to challenging the system itself.⁴⁷⁸ The investigation of government-supported MOOCs is one way in which MOOCs could *challenge* neoliberal education systems and serve to promote education as a public good, and this deserves further research. However, caution should be taken as this vision could still perpetuate inequality by promoting cheaper distance/online education to the poorer masses whilst keeping in-person education at high-ranked universities for the privileged.

While the institutional framing of the MOOC space has not been challenged in the suggestions put forward, the MOOC designers interviewed in this research provide hope for institutional change. The most important aspect in supporting marginalised groups was the MOOCs designers who *embodied openness*; they cared about participants' wellbeing, were reflexive of their positionalities, assumptions, practices and actions, and sought to continuously improve their MOOCs. These designers were intentional in the ethos of their designs, took a human-centred approach and focused on the process of MOOC design rather than the product of it. Pushing their institutional boundaries, they strove to promote open and justice-oriented MOOCs.

⁴⁷⁸ To use the words of Fraser (2005), many of the suggestions were affirmative rather than transformative (Section 3.4.2), Making MOOCs justice-oriented within a neoliberal frame does not challenge the system.

Appendix A – MOOC Designer Codes

Table A-1 MOOC designer codes

Pseudonym	Country	Role	Role Code	Gender	Uni Code	Race	Full Code
Richard	SA	MOOC Instructor	MI01	Male	1	White	MI01M1W
Rachel	SA	Practitioner	PR01	Female	2	White	PR01F2W
Anna	SA	MOOC Support	MS01	Female	2	White	MS01F2W
Nombuso	SA	MOOC Support	MS02	Female	2	BME	MS02F2B
Monique	SA	MOOC Support	MS03	Female	1	White	MS03F1W
Samantha	SA	Practitioner	PR02	Female	7	White	PR02F7W
Thomas	SA	MOOC Instructor	MI02	Male	1	White	MI02M1W
Chris	SA	MOOC Instructor	MI03	Male	1	White	MI03M1W
Matthew	SA	MOOC Support	MS04	Male	3	White	MS04M3W
Mishqah	SA	MOOC Support	MS05	Female	3	BME	MS05F3B
Evan	SA	MOOC Instructor	MI04	Male	3	White	MI04M3W
Francois	SA	MOOC Instructor	MI05	Male	3	White	MI05M3W
Craig	SA	MOOC Instructor	MI06	Male	3	White	MI06M3W
Caroline	SA	MOOC Instructor	MI07	Female	3	White	MI07F3W
Ranjeni	SA	MOOC Instructor	MI08	Female	3	Indian	MI08F3B
Nnenne	SA	MOOC Instructor	MI09	Female	3	BME	MI09F3B
Ahmed	SA	MOOC Instructor	MI10	Male	4	BME	MI10M4B
Riyaadh	SA	MOOC Support	MS06	Male	4	BME	MS06M4B
David	SA	MOOC Instructor	MI11	Male	3	BME	MI11M3W
Priya	SA	MOOC Instructor	MI12	Female	3	BME	MI12F3B
Victor	SA	MOOC Instructor	MI13	Male	3	BME	MI13M3B
Pieter	SA	MOOC Instructor	MI14	Male	3	White	MI14M3W
Hannah	Cambridge	MOOC Instructor	MI15	Female	5	Unknown	MI15F5U
Chad	Cambridge	Practitioner	PR03	Male	7	White	PR03M7W
Calvin	Cambridge	MOOC Support	MS07	Male	6	Unknown	MS07M6U
Bradley	Cambridge	MOOC Support	MS08	Male	5	White	MS08M5W
Daniel	Cambridge	MOOC Support	MS09	Male	5	Unknown	MS09M5U
Mike	Cambridge	MOOC Support	MS10	Male	5	White	MS10M5W
Elizabeth	Cambridge	MOOC Support	MS11	Female	6	White	MS11F6W
Kevin	Cambridge	MOOC Support	MS12	Male	6	White	MS12M6W
Anthony	SA	MOOC Instructor	MI16	Male	2	White	MI16M2W
Sibusiso	SA	MOOC Instructor	MI17	Male	1	BME	MI17M1B
Thato	SA	MOOC Instructor	MI18	Male	1	BME	MI18M1B
Pauline	SA	MOOC Instructor	MI19	Female	1	White	MI19F1W
Loyiso	SA	MOOC Instructor	MI20	Male	2	BME	MI20M2B

Source: Author's own

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