Raising 'learning outcomes' for inclusive higher education:
The Miratho Project

Published by

McLean, Monica and Melanie Walker.
Low-Income Students, Human Development and Higher Education in South Africa: Opportunities, obstacles and outcomes.
Project MUSE. muse.jhu.edu/book/101916.

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CHAPTER 1

Raising ‘learning outcomes’ for inclusive higher education

The Miratho Project

In rural South Africa during times of floods some villages become stranded and children cannot reach schools in other villages. To prevent the disruption of their children’s education, communities build makeshift bridges, known in Tshivenda as ‘Miratho’. These bridges are rickety, therefore it takes courage on the part of parents and students to traverse them when they might collapse at any moment. Over a period of five years, our research project followed the educational experiences, from leaving school to graduating, of about 60 university students from low-income rural and township households in South Africa. We called the project Miratho because these bridges symbolise the determination of such students and their families to work together to pursue education for a better future for all, in the face of severe obstacles and risks.

Tintswalo is one such student who has pulled through against many odds. His secondary school in a rural village was dilapidated and the only resources were textbooks which he carried with him through the bush to school and back to his home ten kilometres away, so that the goats in the school’s village would not eat them during the night. His teachers and an uncle encouraged him, and he achieved the grades to enter ‘Country University’, a rural historically disadvantaged university, to study for a BEd in agriculture and biology. At university, bursaries were delayed, but he managed to eat enough and pay rent with help from his family. Life was tough in his first two years at Country. Learning in English was difficult and his access to computers was limited, but he enjoyed his course, and his friends were like brothers who kept him going. He worked extremely hard, focused on his dreams for a better life and gained in confidence. Tintswalo is now teaching Life Sciences at his old secondary school and is living at his family home. He would like to obtain a PhD. However, as we shall show, by no means have all the students’ journeys so far have ended with employment or further study.

1 Our project was funded by the Economic and Social Research Council (ESRC) and the Department for International Development (DFID), now known as the Foreign, Commonwealth and Development Office (grant number ES/NO10094/1), with supplementary funding from the National Research Foundation (NRF) (grant number 86540). The project was funded till September 2020, with a no-cost extension to June 2021.

2 A total of 66 students were included for the first interviews in 2017 and 58 by the last in 2020, with an informal follow-up in 2021. Originally, we had planned for 48 interviews across four universities, but the Thusanani Foundation non-governmental organisation (NGO) asked us to include Rural University. In some universities we were able to recruit more than 12 students.
What the Miratho participants have in common is the battle to get into university, to flourish at university, and to transition to work or further study. As researcher Nic Spaull (in Nxumalo 2021: 1) has pointed out, while degree-entry grade 12 passes have increased by 7% since 2011, university enrolment has grown by just 2.7% since the same year. Spaull (Nxumalo 2021) recounts the 2016 Davis Tax Committee report which gave a stark glimpse into access to higher education: Only 10% of children from the poorest 70% of the population qualify to go to university, compared to 40% of children from the wealthiest 10% of the population. As Spaull (in Nxumalo 2021: 1) explains, ‘The children of the wealthy are likely to get to university because the children of the wealthy are more likely to attend functional schools which give them the passes that they require to gain entry to university’. We can assume that the challenges for the 70% are significant.

The call for funded research proposals in 2015 to which we responded was focused on ‘raising learning outcomes in education systems in challenging contexts’. Miratho had two main aims. First, the project aimed to investigate how complex biographical, socio-economic, policy, and educational factors interact to enable or inhibit pathways for rural and township youth to get into, get on, and get out of higher education with valuable learning outcomes. Second, we aimed to explore a theoretical approach for understanding higher education learning outcomes which considers students from low-income backgrounds who face multi-dimensional challenges when pursuing education. In this book we will discuss what we learned of the students’ lives and how we conceptualised the multi-dimensional benefits that such students value and can accrue from a university education. In parallel, we discuss the limitations on benefiting, resulting from students’ university experiences, their personal circumstances and the broader socio-economic context.

In the rest of this chapter, we first locate our research within a commitment to human development defined as expanding people’s freedoms and opportunities towards improving their well-being. In this definition, higher education is one of society’s public goods. Next, we outline our research methodology and methods and introduce the capability domains which are the product of the research. Finally, we sketch the main argument of the book as it unfolds chapter by chapter.

**Rationale for pursuing the human development capability approach (CA)**

The United Nations Development Programme (UNDP 2020) defines human development simply:

> The human development approach is about expanding the richness of human life, rather than simply the richness of the economy in which human beings live. It is an approach that is focused on creating fair opportunities and choices for all people.

Human development focuses on human flourishing and freedom from poverty and other deprivations. Having followed our South African students from low-income backgrounds through tribulations and some triumphs as they tenaciously pursued a university education for six years or more, our commitment to human development
principles and goals has been strengthened. The Miratho students’ experience of poverty is a legacy of colonialism and apartheid, not least in the historical imposition of rural ‘bantustans’ or ‘homelands’ set aside for Africans and segregated urban townships (see Ross 1999), which are the sites of the home communities of these students. We aim to produce evidence and an argument for proposing that South African universities’ contribution in social transformation and human development should have a dual focus: on mitigating the effects of material deprivations and redistributing material resources more justly, which we understand as integral to the decolonisation project; and, on a wider set of opportunities and freedoms for students from low-income households. In turn, the expansion of such freedoms can have a positive impact on social development and the public good.

The capability approach is grounded in human development. It was developed with a focus on poverty reduction by the welfare economist Amartya Sen (1985, 1999) who is committed to human development and social justice. Later, Martha Nussbaum (1997, 2000, 2003, 2010, 2011) took up Sen’s ideas, bringing in a philosophical perspective to the capability approach and producing her own set of ten ‘universal’ capability dimensions. Since then, the approach has been applied in many social fields, including education.

The capability lens has the power to illuminate both the conscious and deliberative aspects of human agency (the decisions and choices that students make) and how structural inequalities present barriers to students’ success. In the terminology of the approach, ‘capability’ is the opportunity and freedom to make choices in life, while ‘functioning’ is an achieved being or doing. We employ this approach because it enables us to investigate and evaluate the fair distribution of what matters to people in the form of capabilities and functionings.

As Mahbub ul Haq (2003: 17) elucidates, ‘the basic purposes of [human] development is to enlarge people’s choices’. While a definition of human development might be simple, the actualisation of such a vision is complex and requires demanding transformations across multiple economic and social arenas. In this book, we argue that the mainstream discourse of learning outcomes in education does not offer sufficiently expansive conceptual and theoretical purchase on the highly complex problem of educational success, which should encompass economic, social, historical-colonial, political, cultural, and psychological aspects of human life. Rather than restricting focus to pre-specified ends of curricula and pedagogy, our conceptualisation is grounded in human development applied to all aspects of a university education, linking opportunities, processes, and outcomes.

The Miratho students are human individuals trying to set themselves apart from a crisis of poverty and inequality in the world, exacerbated now by Covid-19. In 2018 the World Bank³ declared that it had set itself the goal of ending extreme poverty by 2030 by reducing the share of the global population living on less than USD 1.90 a day (about ZAR 30), and by increasing the incomes of the poorest 40% of people in every country. Even such modest goals are in serious jeopardy. After 15 years of progress in eradicating poverty, Covid-19 pushed approximately 124 million more people below the poverty line in 2020 (Van Trotsenburg 2021). Calculations indicate that the pandemic’s potential impact on multi-dimensional poverty reduction is between 3.6 and 9.9 years.

³ https://openknowledge.worldbank.org/handle/10986/30326
All over the world, health, educational and social inequalities have been both exposed and worsened, including in South Africa.

Of direct relevance to us is that, within these circumstances, tertiary education is in crisis (World Bank 2021) and students or new graduates who come from low-income households are most vulnerable to the adverse effects of the pandemic and reduced graduate employment opportunities. According to Unesco (2020), during 2020, 166 countries had closed universities, affecting 87% of the world’s student population, a staggering 1.52 billion students. Inevitably, the lower the income of a student’s background, the more disadvantaged they will be by being unable to attend university. Most obviously, benefiting from digitalised education relies on resources, time and space, even for those who make it into university. So, it has become more urgent to think about economic, social and educational arrangements to support under-represented students to work towards their futures and to challenge the deficit position they are viewed from.

Universities can serve both economic development and social justice and are, therefore, significant for human development (Boni & Walker 2016). Yet, globally, the discourse of human capital dominates; that is, the measure of skills, capacity and attributes of labour which emphasise peoples’ productive capacity and earning potential (Becker 1964). Despite challenges to human capital revealing how its analyses recognise neither diversity nor a lack of good jobs (Brown et al. 2020), higher education continues to be portrayed as a vehicle for producing human capital for national and international wealth creation in a world becoming increasingly characterised by technology-dependent knowledge economies (Castells 2017a). A recent study of low- and middle-income countries (Howell et al. 2020) found that universities contribute to sustainable economic development locally and nationally, but do less well on social development and inclusion. Yet the study found that graduates make demands for equality, human rights, health, education and peacebuilding. In low- and middle-income countries there is evidence of wider social and individual benefits. Compared with non-graduates, graduates enjoy social mobility, better health, more stable employment, more autonomous work, higher lifetime earnings, and more engagement in civic affairs (Oketch et al. 2014).

Since the end of apartheid, South Africa has been concerned with expanding higher education for social transformation. In line with development agendas across the world and on the African continent, higher education in South Africa is seen as playing a significant role in growing skills and a knowledge economy (National Planning Commission 2012). However, the transition in 1994 from a racially segregated system has generated equity and quality imperatives. Consequently, while human-capital higher education goals have been prioritised in most countries, in South Africa, universities have been closely associated with redressing apartheid’s racial inequalities, thereby contributing to social transformation by offering social mobility. According to Cloete and Van Schalkwyk (2017: 4), this preoccupation resulted in the National Commission for Higher Education’s (NCHE 1996) framework which focuses on equity and democratisation, while paying virtually no attention to development, research and

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4 See Van Schalkwyk et al. (2021) for a recent critique of the muddiness of the transformation discourse notwithstanding real quantitative gains in equity.

5 See, for example, the African Union’s Agenda 2063: The Africa We Want (https://au.int/en/agenda2063/overview; and, Continental Education Strategy for Africa 2016–2025 (https://au.int/en/file/33863-doccesajournalvol2finalpdf)
innovation. Be that as it may, the goal of higher education for socio-economic redress has not yet been achieved. Most students from low-income households in South Africa leave school at grade 10 or earlier and do not go to university (Walker 2018b). The benefits, quality and outcomes of higher education continue to be inequitably distributed (Lewin & Mawoyo 2014). Underpinning our research has been the question of what kind of university educational aims, policies and practices might promote both economic growth and individual prosperity and a broader conception of equality and human flourishing.

Until now there has not been a systematic, integrated, longitudinal mixed-methods South African investigation of the multi-dimensional dynamics or factors shaping and/or inhibiting low-income students' capabilities to access, participate and succeed in a variety of higher education institutions, and to move on to work or further study. Nor do we have much research on rural students or rural universities (although see Mgqwashu et al. 2020; Naidoo et al. 2020; Timmis et al. 2019; Trahar et al. 2020). The Miratho Project for the first time offers fine-grained detail derived from talking to students about how they understand and experience disadvantage, equity and educational quality and about how higher education can foster or frustrate the agency and decision-making processes that empower them to change their own lives and those of others.

While statistics tell of the broad trend of inequalities in South African higher education, our research fills a lacuna about the past experiences and day-to-day realities of undergraduates from low-income households. We offer a rich and nuanced account of how these students grew up, how they made the decision to go to university, and got in; how they survived and studied and nourished their aspirations; and, how they are now sustaining or trying to sustain their aspirations for a better life, including social mobility.

Methodology and methods of data generation

The Miratho Project was designed to investigate the complexities of how higher education opportunities and achievements are distributed among students from challenging low-income households. It also aimed to generate data which illuminate, from a capabilities perspective, what students do gain from a university education that is of value to them and what they should gain. In this sense our research is ‘phronetic’ (Flyvbjerg 2001) in that we aim both to develop knowledge that has explanatory power in relation to equity in higher education access, participation and outcomes, and to suggest practical action to address the challenges.

As education researchers we have long been committed to contributing to justice and equality. As the project progressed, we realised the need for increased sensitivity to a decolonial ethic which challenges West-centric knowledge practices. We see this book as a contribution to Africa-centred Southern scholarship. It was important that the original research proposal came from the University of the Free State and that the funded project was led by a South-based scholar as principal investigator (unlike the majority of the projects in the research programme on raising learning outcomes referred to earlier). During the time of the project, South African students were also involved in protests about access to university (#FeesMustFall) and the need to decolonise the discursive practices of universities (#RhodesMustFall). All over the world, educators
and researchers were urged to scrutinise their own discursive practices, while recently there has been a plethora of webinars, blogs and conferences (mostly initiated by the global North) about decolonisation and decoloniality (Mignolo & Walsh 2018).6

Writing about decolonising methodology, Tuhiwai Smith (2012: 2) warns that ‘belief in the ideal that benefiting mankind is indeed a primary outcome of scientific research is as much a reflection of ideology as it is of academic training’. Similarly, we should be wary of our version of ‘development’. We should cease to take for granted that we are representatives of communities which are disadvantaged and of those who are stereotyped as lacking epistemic material to contribute to shared knowledge and development outcomes they value. Well-meaning higher education research will carry and represent the residual cultural presence of colonisation (Maldonado-Torres 2007). We understand that our research practices, as well as the substantive focus of our research, should be grounded in advancing ‘authentic humanity’ (Smith 2012: 24). As Tuhiwai Smith (2012: 41) puts it, as researchers we ought to be committed to producing knowledge ‘that helps create spaces for the voices of the silenced to be expressed and “listened to,” and that challenge racism, colonialism and oppression’. Research need not privilege the interests and power of the (academic) researcher but rather reposition those who have been objects of research into ‘questioners, critics, theorists, knowers, and communicators’ (Ndlovu-Gatsheni 2017: 1). Thus, Goetze’s (2018) ‘epistemic humility’ highlights the need to admit the gaps in one’s own interpretive tools as a (decolonial) researcher of the lives of others, primarily referring to those that have experienced epistemic marginalisation.

In particular, a participatory element to the research allowed us to acknowledge low-income students from rural and township areas in South Africa as legitimate producers of higher education knowledge based on how they experienced, understood, learned and talked about exclusions and inclusions at university. Thus, in Miratho, we sought to address misrecognition and research exclusions by contextually understanding the experiences and perceptions of students through their own eyes and with their own voices and by forming and sustaining meaningful relationships with the group over more than four years. Nor was this outsider ‘parachute’ research. Most of the research team are deeply embedded in the context and committed to working for real transformation in higher education in South Africa over time.

Complex datasets were required because the distribution of capabilities is revealed in biographical detail about families and schools; in the students’ lived experience of university educational and social arrangements and of preparing for working life; and in their values and commitments. Insights gained by exploring student pathways, experiences, aspirations and future plans were contextualised by statistical information of trends in university access, participation and outcomes, and by keeping up with the policy context. The multi-method, longitudinal approach generated the following datasets combining fine-grained individual qualitative data, surveys and existing large datasets.

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6 For a perspective on global South and global North knowledge and research relations see Walker and Martinez Vargas (2020). Also, while post- and decolonial viewpoints are on the development agenda, there are also criticisms of a co-opted approach in the North which fails to challenge underlying unjust structures.
Table 1.1 Summary of Miratho datasets

<table>
<thead>
<tr>
<th>Summary of Miratho datasets</th>
</tr>
</thead>
<tbody>
<tr>
<td>246 transcribed life-history interviews with between 58–66 students interviewed four times between 2017 and 2021. There were between 12 and 15 in each of 5 universities, with an overall attrition of 8 students (one of whom died) by 2020.</td>
</tr>
<tr>
<td>Participatory research generated three photobooks containing the ‘photovoice’ stories of 19 students and one Common Book, field notes and transcribed recordings of workshops.</td>
</tr>
<tr>
<td>Recordings of three ‘Identity Wheel’ and ‘Imagined Futures’ workshops for life-history participants.</td>
</tr>
<tr>
<td>Thirty-nine Miratho students completed a pilot survey and 472 students in one university completed the revised student survey.</td>
</tr>
</tbody>
</table>

Note on data analysis

Interview transcriptions, participatory research and survey data were analysed as discrete entities. Ethnographic field notes from field trips to interview students and to facilitate participatory research, along with field notes and materials from workshops and secondary quantitative data, were drawn on only to supplement the primary analysis as the processes of analysis and interpretation proceeded. The combined data were further informed by textual data including national development and education policies, media reports, university mission and vision statements, and relevant websites. By contextualising qualitative data within a socio-economic, quantitatively informed understanding, there emerged both a macro view of the educational pathways of the selected student population and fine-grained micro accounts of students’ lives. The combined data have been iteratively interrogated, analysed and theorised, and these processes have resulted in the creation of the South African multi-dimensional, intersectional capability-based Miratho Matrix which is a key outcome of the research (see Chapter 4). There now follows a more detailed account of the elements of the research.

The longitudinal life-history interviews

Life-history interviews with students at five different universities took place four times, starting in 2016 with second-year students (third-year at Rural) to allow for the high drop-out rate in the first year and for students to have completed at least one year of university to reflect on. The last interview was in 2020, six years after they had first registered at university. In 2021 we followed up with nearly all the students using WhatsApp. All of these interviews are the centrepiece of the Miratho research project and constitute the main material for the book. They comprise 246 longitudinal life-history interviews whereby we were privileged to capture the life stories of students told in their own distinctive voices. Fine-grained annual life-history data served as a micro lens on well-being, revealing over time the intersections between biographical and material circumstances and social and educational experiences. The data allowed us to chart the complex interactions of agency and conversion factors, including structural constraints or enablers.

Participating students

Access to university students for research purposes is difficult unless the research team
also composed of university staff who teach undergraduates themselves and conduct research at the university. For this reason, the project worked with the youth-led non-profit Thusanani Foundation\(^7\) which supports students from rural areas and townships to apply for and – to some extent – succeed at university. So, the student research participants were those who had gained access to higher education through the support of the Foundation. Two of the staff joined us for the first round of fieldwork to explain the Miratho Project to students they knew and to help organise the first two years of interviews. The students whom the Foundation was supporting came from rural KwaZulu-Natal (KZN), Limpopo, the Eastern Cape, and some Gauteng townships. The table below offers key information about the students.

**Table 1.2 Profile of life-history students**

<table>
<thead>
<tr>
<th><strong>Gender</strong></th>
<th><strong>Female</strong></th>
<th><strong>Male</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community</strong></td>
<td>Rural</td>
<td>56</td>
</tr>
<tr>
<td>Township</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>School quintile</strong></td>
<td>1–3</td>
<td>60</td>
</tr>
<tr>
<td>Township</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>First in extended family to attend university</strong></td>
<td>Yes</td>
<td>35</td>
</tr>
<tr>
<td>No</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td><strong>Level of university study</strong></td>
<td>Three-year diploma</td>
<td>12</td>
</tr>
<tr>
<td>Undergraduate degree (three or four years)</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td><strong>Broad field of study</strong></td>
<td>Accounting</td>
<td>11</td>
</tr>
<tr>
<td>Education</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Commerce and marketing</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Engineering: mechanical, civil, mining</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Governance and management: public, tourism</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Law</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Maths, logistics and computing</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Natural sciences: biochemistry, chemistry, soil science, genetics</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Social sciences: politics, indigenous knowledge systems, language</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Award status in 2020–2021: six to seven years after registration</strong></td>
<td>Completed with transcript</td>
<td>38</td>
</tr>
<tr>
<td>Completed but transcript withheld due to debt</td>
<td>5*</td>
<td></td>
</tr>
<tr>
<td>Not completed</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Dropped out of studies</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Work/further study: 2020–2021</strong></td>
<td>Employed</td>
<td>14*</td>
</tr>
<tr>
<td>Continuing undergraduate study</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Further study</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Internship, training, community service</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

\(N=66\) for the first interviews in 2017 and 58 by the last in 2020 and for the 2021 contact.

* Students do not receive their transcripts if they owe the university money. Without a transcript a graduate cannot be employed as a graduate or enrol for further study.

* 7 in permanent, full-time employment and 7 with contracts and part-time employment.

~ 14 were graduates and two non-graduates who had dropped out of their studies.

7 https://thusananifoundation.org/ Thusanani means 'helping each other'.
After six years of registration (seven for Rural students), 36 of our original Miratho 66 had successfully completed their course. This is consistent with the national average of 58.1% (a combined aggregate of 61.6% for degrees and 47.8% for three-year diplomas) (Jeynes 2016). For now, we draw attention to most students’ being from rural communities and most going to schools with limited resources. Over half have a relative who has entered (but may not have completed) higher education before them in their families.

The students attended five diverse universities for which we use pseudonyms and give a short description below to convey the diversity but maintain anonymity.

**Table 1.3 The Miratho universities**

<table>
<thead>
<tr>
<th>Pseudonym of university</th>
<th>Description</th>
<th>Number of students retained for interview in 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country University</td>
<td>Comprehensive, rural, formerly disadvantaged</td>
<td>12</td>
</tr>
<tr>
<td>City University</td>
<td>Comprehensive, urban, large, formerly advantaged</td>
<td>13</td>
</tr>
<tr>
<td>Metro University</td>
<td>Traditional, urban, elite, formerly advantaged</td>
<td>13</td>
</tr>
<tr>
<td>Provincial University</td>
<td>Traditional, urban, mid-ranking, formerly advantaged</td>
<td>15</td>
</tr>
<tr>
<td>Rural University</td>
<td>Comprehensive, rural, formerly disadvantaged</td>
<td>13</td>
</tr>
</tbody>
</table>

Two of the universities (Country and Rural) have lower national status and lower status with employers (Walker & Fongwa 2017). They are also at a distance from major metropolitan centres, have large numbers of low-income students, and are less well-sourced overall. On our fieldwork visits we found the differences to be visible, with Rural being by far the least advantaged of the five universities with the main campus and buildings looking rundown, the residences unattractive, and the campus unsafe. Country and Rural are historically disadvantaged universities. Thus, it is clear that apartheid and colonialism constitute key background factors, shaping the universities as they do today, shaping geographical resources and distribution, and influencing individual lives so that being black\(^8\) means you are more likely to be from a low-income household.

**The conduct of the life-history interviews**

The first three interviews (2017, 2018, 2019) were conducted by members of the research team in venues that were accessible to the students near or at their universities. Due to Covid-19 the final interview in 2020 was by telephone and in 2021 we used our Miratho WhatsApp group. Although the geographical distance was great in the case of some universities, most team members visited all universities some time during the project. Such visits were regarded as ethnographic, enriching our understanding of the environment that the students were living and studying in.

For the first and second years of interviews, the Thusanani Foundation encouraged the students to attend the interview, sometimes transporting them. After that, members

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8 We would prefer to eschew racial categorisation altogether but it continues to dominate official statistics and daily discourse in South Africa, where ‘black’ is taken to mean African.
of the research team developed a relationship with the students such that they remained in contact between interviews and arranged for interviews directly with the students. Interviews lasted between an hour and two hours. To signal the value of the time students were giving and the effort they were making, they were offered vouchers for shopping and airtime, as well as refreshments during the interview. Some students travelled significant distances to talk to us and were reimbursed for travel costs.

Each year the research team agreed upon the interview schedule. The first year involved asking students for a good deal of autobiographical information about family, school and community; about their experiences of getting into university; and, about their experiences of leaving home and being at university for a year (or two years in the case of Rural), including all aspects of studying and social and material living (e.g. food and accommodation). In subsequent years we would update information about economic circumstances and how they were progressing with their studies. We also reviewed the questions to probe further as we learned about what students valued about university and about what they were gaining or not gaining from the experience. For example, in 2018 we made a special effort to discuss what knowledge and understanding they were acquiring and how they were acquiring it. The final telephone interview focused on future plans, while the informal follow-up in 2021 focused briefly on who was employed or in further study.

**Analysing the life-history data**

All life-history interviews were transcribed, and the life-history data were analysed in four different ways:

1. The data were analysed thematically in NVivo qualitative data analysis software. This process began with the research team reading through selected first-year transcripts individually and then discussing these reflectively for emerging themes and agreeing on codes to create a code book as the basis for disaggregating data in NVivo. The code book was revised after the second round of interviews and then sustained for the rest of the project.

2. The identification codes were informed by adopting an inductive approach to prevent over-imposing our own framework onto the findings (Thomas 2006). All interviews were coded using grounded descriptive codes, for example, ‘family’, ‘community’, ‘school’, ‘significant others’, and so on, and then clustered into themes. The themes were categorised in various ways: as capabilities, as agency, and so on.

3. At this stage, we still maintained the distinction between what Bernstein (2000) calls the internal language of description, which is the language of the conceptual model (in our case, capabilities) and the external language of description, which are the empirical descriptions that students offered in their own words. Adherence to this distinction made us more open to the opportunities and freedoms that were emerging as central to students’ well-being, and we made constant modifications to our list in the light of empirical findings. The analysed thematic data lend weight to the Miratho Matrix discussed in Chapter 4.

4. A longitudinal holistic synopsis was created for each student, updated after each interview, which provides a counter to the data fragmented in themes. Here we can see how systemic and structural barriers and opportunities play out in the life of an individual student who exercises agency.
5. Based on the synopses, three conversion factor tables for each student were drawn up whereby data were organised to reveal how all kinds of resources (material, personal, social, educational) available to them interacted and converted into valued beings and doings as they: (a) accessed university; (b) progressed through university; and, (3) moved out of it to further study, work or unemployment. This analysis has shaped this book. See Chapter 3 on conversion factors and Chapters 5, 6 and 7 which are case studies of access, participation and outcomes.

6. Similarly, based on the synopses, hardship tables were drawn up for each student, which categorised them each year according to the degree of hardship they were facing: acute, intermediate or limited. Each category carries a descriptor which supports an analysis of how economic deprivation impacts on students’ capacity to engage and succeed in university life. These tables are discussed further in Chapter 3.

**Participatory research**

This strand of the research aimed to give genuine voice to young people in the research and policy-making process. The result was a set of ‘photovoice’ stories for 19 individual students bound in three collective books. Students also worked together on one Common Book. The focus was on student conceptualisations of intersectional disadvantages (framed as inclusions and exclusions) in relation to learning outcomes and on exploring student higher education pathways, experiences and outcomes.

The process involved workshops over a four-day period in 2018 in three different provinces. The first day of the workshop was dedicated to working on River of Life drawings. This was the first step of reflecting on students’ educational journeys at university and using visual methods to aid in storytelling. The second day was dedicated to brainstorming ideas around experiences of inclusion and exclusion in students’ university lives and how these experiences affected and/or continue to affect them. The third day was assigned to photography training, including ethical considerations for taking photographs of people for research and artistic purposes. The fourth day focused on the curation of the photos and the enhancement of their stories. Students reflected on their stories and how to tell them through the photos they took, including giving each photograph a caption and deciding on a title for their photo stories. An exhibition was held in 2019. The photovoice project formed a discrete dataset of interviews and field notes analysed according to our themes of capabilities, agency, participation, voice, and so on. We have not detailed the photovoice project in this book but have written about it elsewhere (Walker & Mathebula 2020).

**Student survey**

The development of the survey instrument was based on findings from the qualitative data and was first piloted with the Miratho life-history student participants only. The survey was intended to establish which learning outcomes the students valued as functionings for their own well-being. Student biographical data were collected, and they were presented with capability-based dimensions to evaluate (see Chapter 4). The revised survey of 472 final students at Provincial University in 2019 was analysed using SPSS software. All students were anonymised in the data. We draw only lightly on this survey data for the purposes of this book, but it merits further analysis elsewhere.
**Ethical conduct of the research**

Serious consideration was given to conducting the research according to ethical protocols and a respectful stance towards all participants. The study involved human participants in potentially sensitive areas. In particular, university students were encouraged to disclose aspects of their biographies and to tell us about their experiences, which were often distressing.

Students took part on a voluntary basis. Principles of informed consent operated throughout the project. Information was given in workshops at the start of the project, and information sheets and consent forms were available at interviews. It was clarified that what was said was confidential and that participants would not be identified in any forum or in published work. Moreover, we have given universities pseudonyms and minimal descriptions to keep them anonymous. During the photovoice project, the ethical use of photographs of people was discussed in student workshops, and training was provided in research ethics.

**Use of secondary datasets**

**HEMIS**

South African Higher Education Management Information System (HEMIS) data (2006–2013 and 2007–2013) were analysed to generate a national and longitudinal view of inequalities and learning outcomes measured by access and completion rates of rural and township students after eight years (Shepherd 2017). We only touch on this report here. Based on the 2006 and 2007 entering cohort and the generation of categories using postal codes to identify rural from urban and township students, slightly fewer rural students overall entered higher education: 15% rural, 17% township and 68% urban. Women in the 2006 and 2007 cohorts did better across all degree categories. For example, for the 2006 first-time entering cohort in four-year degrees, 63% of the female students compared to 48% of the male students from rural areas graduated after eight years. Students from township areas showed similar trends, with 59% female students compared to 41% male students graduating after eight years. For students from urban areas, 62% female students and 50% male students graduated after six years. Female students enrolled for three-year national diplomas performed much better than their male counterparts.

We have indicative completion figures for four of the five project universities drawing on an analysis of three- and four-year degrees. Diplomas were not analysed for each university as not all the universities offered these. City had the highest completion rate (63%) for the 2007 cohort, followed by Metro. Country and Provincial had much lower completion rates than the other two for both the 2006 and 2007 cohorts. For the 2007 cohort for four-year degrees, City had the highest completion rate (61%) followed by Provincial (52%). Metro had a 48% completion rate, while Country had the lowest completion rate at 41%. In both cohorts the students from urban areas had the highest completion rates (55% for the 2007 cohort). Students from rural areas did better (53% for 2007) than students from townships (51% for the 2007 cohort). Completion rates vary from year to year, so these figures are only indicative of trends, with lower access and completion rates for township and rural students. We can assume that these students face more challenges than other students in completing their degrees and diplomas. In this book we expand qualitatively on this picture.
Statistics
The annual Community Household Survey from 2017 (StatsSA 2017) and the South African Census from 2011 were analysed to track composite education, living conditions and employment trends nationally and at provincial and district level across ten selected indicators drawn from relevant research (Wilson-Strydom & Walker 2019). The analysis incorporated a particular focus on three selected rural districts in Limpopo, KZN and the Eastern Cape, providing additional descriptive and contextual information against which the primary data generated through this study can be interpreted. This data allowed us to see that students came from challenging contexts with regard to educational outcomes, living environment, work, household income, assets and credit, food security, health, transport, technology, and peace, violence and community. The complete secondary dataset, which is drawn on for Chapter 3, is available.

Taken together, these analyses produced fine-grained narratives and statistical accounts and generated a capabilities metric to evaluate learning outcomes. While each analysis has been rigorously undertaken and analysed and interpreted throughout this book, data are selectively drawn upon and brought together to: (1) convey the Miratho students’ experience of, access to, participation in, and going out of university; and, (2) justify both the argument that learning outcomes can be conceptualised as valued freedoms and opportunities and the specific capability-based matrix which is a key product of the research.

Capability-based learning outcomes in the Miratho Matrix
The book unfolds to show how the Miratho Project’s exploration of students’ experiences of accessing, being at, and leaving university provides a justification for the Miratho Matrix and its set of eight multi-dimensional capability domains. We introduce the set very briefly here (Chapter 4 expands) to orientate readers to the chapters that follow.

The domains were derived both empirically and theoretically. Empirically they were derived from what the students told us in the life-history interviews over four years, through the photovoice element, and from the survey. Theoretically, the domains were derived from research and theory about the effects of living in poverty and about human well-being and flourishing. These capability domains represent the opportunities and freedoms that university education in South Africa should offer students to enable them to choose beings and doings that they value as the basis for evaluating the justice of higher education. Each capability domain has a ‘key functioning’ which can be conceptualised as a ‘learning outcome’. The functionings can be thought of as pertaining both to university students while participating in university and to graduates when they have moved on to life after university as citizens and workers (Chapter 2 elaborates on this argument).

Below we list each capability domain, an indicative cluster of capabilities for each, and the corresponding key functioning.

Epistemic contribution: Being an epistemic contributor
Being an epistemic contributor is being a respected knower, teller and listener at university and in society. In the context of university education, this domain emerged as what Martha Nussbaum calls an ‘architectonic’ capability; that is, it ‘organises and
pervades’ all the other capability domains. The knowledge of fields and disciplines that students acquire at university is key to this functioning. Ideally students are transformed by this knowledge which supplies opportunities to reason, understand, apply, examine critically, and so on (see Chapter 6).

Ubuntu: Being connected to and concerned for the well-being of others
As expected, the students brought ubuntu with them to university and exercised it throughout, supporting each other through good and bad times. This capability relates to an Africa-centric ontology and cosmovision, and hence to decoloniality.

Practical reason: Planning a good life
At university and throughout life, students and graduates should have the means and dispositions to form ideas about what (at any time) constitutes for them a good life and to make decisions and take steps to achieve such a life. These means and dispositions include having knowledge and information, as well as holding aspirations, and developing confidence and a sense of independence – all of which a university education can support.

Navigation: Navigating university/society’s culture and systems
For most Miratho students, excitement at coming to university gave way to having to deal with an alien environment. All brought this functioning with them and further strengthened it with little assistance from universities, describing it as ‘adaptation’. For Tara Yosso (2005), who employs critical race theory, navigation is a capital with which to deal with structural barriers and includes identifying what needs adapting to, seeking and giving support, and staying power.

Narrative: Telling one’s own story
Some Miratho students did have the opportunity and freedom to tell their own stories in the photovoice element of the project, and by their own accounts they benefitted significantly. For students from low-income households, the capability of narrative relates strongly to a decolonising ethic. Most university students do not get such an opportunity.

Emotional balance: Dealing with the stress and worry of challenges
Miratho’s students lack resources. In turn, a lack of preparedness for university meant that they inevitably faced stressful situations.

Inclusion and participation: Being a respected and participating member of the university and of society
This refers to whether students felt like legitimate and comfortable members of university and able to join in wider activities. It also refers to the extent to which they were encouraged to participate when being taught.

Future work or study: Being employable
It is reasonable to expect that university students, especially those from low-income households without networks and connections, would be given preparation to find a graduate-level job in the public or private sector, self-employment or further study (see Chapter 7).
The book will expand on this capability set and reveal how students were positioned in relation to the key functionings, especially in Chapter 4. Reconceptualising learning outcomes as opportunities and freedoms (capabilities) allowed us to investigate the cognitive, affective, social, material goods and processes which were valued by our students and were available to them, as well as the constraining and enabling conditions of possibility they encountered. Our conceptual standpoint has implications for understanding how universities in South Africa might disrupt or reproduce inequalities in dynamic, intersectional and complex ways.

Conclusion

This chapter has set the scene for our account of the Miratho Project. This account intends first to illuminate how complex biographical, socio-economic, policy, cultural and educational factors intersect, enabling and inhibiting pathways for rural and township youth to get in, get along in, and get out of higher education. Second, we intend to justify a capability-based understanding of higher education learning outcomes which considers students from low-income backgrounds who face multi-dimensional challenges when pursuing education. The arguments develop as the book unfolds. We should also note here that we deliberately use the concept of student hardship to refer to income or money deprivations. We are well aware that the capability approach advocates for a multi-dimensional approach to poverty which goes beyond economic opportunities and might include political poverty, cultural poverty and social exclusions. We adopted the language of hardship (Chapter 2) to signal a lack of material resources for a decent life. It is not surprising that material conditions for learning were overwhelmingly the focus of protests in 2015 and 2016 at historically disadvantaged universities (Motala et al. 2021).

The next three chapters clarify our conceptual grounding and explain our theorising. In Chapter 2 we discuss how the capability approach allowed us to reconceptualise the concept of learning outcomes to encompass the multi-dimensional value of a university education and plurality of valued outcomes for students from low-income backgrounds. These students’ experiences are strongly shaped by hardship and other contextual factors, and Chapter 3 explores how the material, social, cultural and personal resources that the students possessed were converted to make university possible. It also shows how a lack of material resources was a severe barrier. While the students participated in university, we talked to them about their experiences and what they valued, and refined the set of capability dimensions. Chapter 4 explains how the capability domains were generated and defines and illustrates them as core to the Miratho Matrix.

Chapters 5, 6 and 7 are three case studies which draw on analysed data from the complete student group: on access to university, on participating in university and on transitioning from university. In Chapter 5 we show that the process of accessing university for the Miratho students (and others like them) was a comparatively common experience and required a clutch of minimal resources to be converted into registering at university. At this point, students had few effective capabilities, but those they had were crucial for getting to university.
Chapter 6 discusses the students’ experiences while at university. Epistemic contribution in its widest sense, including both academic and non-academic materials, emerged as ‘architectonic’ for higher education and we offer evidence for how it suffused and was suffused by other capability dimensions. Most students gained or ‘thickened’ a capability set from being at university, though there were limits on opportunities that should be addressed by policies and practice. However, Chapter 7 shows that, after six (or seven) years of registration, the capability for work and future study was severely hampered by structural conditions which, in turn, curtailed freedom in other capability dimensions.

The three case studies reveal the overall story of the group. However, for different individuals, resources are converted for a university education differently and the extent to which capabilities are evident as key functionings plays out differently. Chapter 8 reveals this by discussing the narratives of five individual students in some detail. To conclude, in Chapter 9 we develop our normative argument for how to deliberate about university education for students from low-income households. Sufficient material resources are necessary to get into university and flourish while there. Also, the benefits of a university education should be rich and multi-dimensional so that they can result in functionings in all areas of life, including work and future study. Lastly, the inequalities and exclusion of the labour market and pathways to further study must be addressed for the benefits that can accrue from university education to be meaningful.