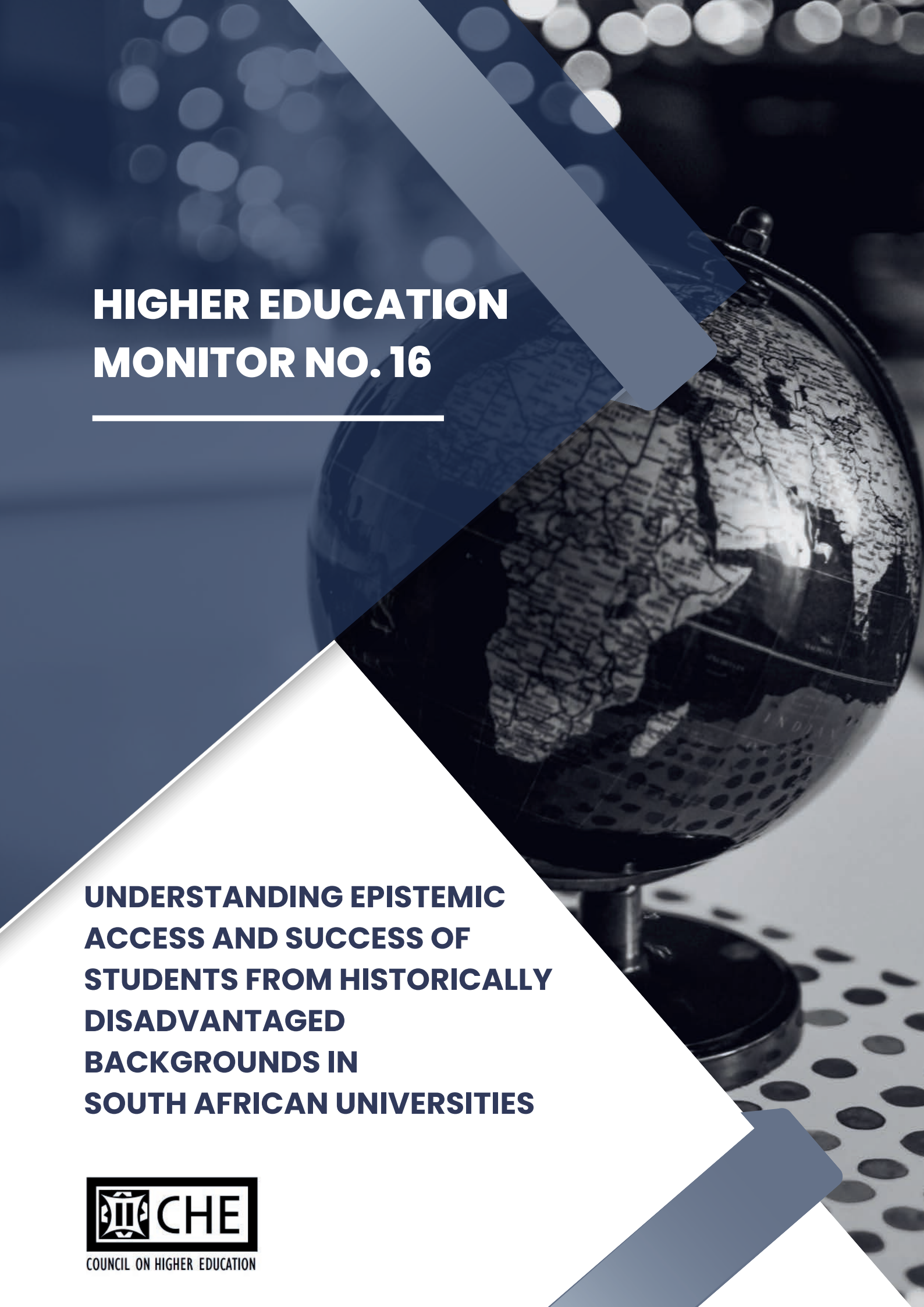

# HIGHER EDUCATION MONITOR NO. 16

## UNDERSTANDING EPISTEMIC ACCESS AND SUCCESS OF STUDENTS FROM HISTORICALLY DISADVANTAGED BACKGROUNDS IN SOUTH AFRICAN UNIVERSITIES

CHE
COUNCIL ON HIGHER EDUCATION

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# Contents

## Foreword

Section 5(1)(d) of the Higher Education Act No. 101 of 1997, as amended, mandates the Council on Higher Education (CHE) to regularly publish information about developments in higher education, including regular reports on the state of higher education. The CHE fulfils this mandate by conducting research and monitoring developments on key issues within the higher education system in South Africa, and by disseminating the information and findings through reports and publications. One of such publications is the *Higher Education Monitor* series whose purpose is to present data and information from research undertaken or commissioned by the CHE on topical issues of interest to the broader higher education sector in South Africa. The first issue of the *Higher Education Monitor* series was published in 2003, and this publication on *Understanding Epistemic Access and Success of Students from Historically Disadvantaged Backgrounds in South African Universities*, is the sixteenth issue of the series.

Expanding access to, and participation in higher education, particularly for students from historically disadvantaged backgrounds, has been one of key tenets of transformation of higher education in South Africa. However, it has been realised that formal admission to higher education programmes on its own, does not guarantee the success of students from historically disadvantaged backgrounds. Firstly, there is the articulation gap between the senior national certificate level and the first year level of higher education that makes the transition challenging. Secondly, the languages of teaching and learning in higher education are often not the home languages of students from historically disadvantaged backgrounds. This creates a barrier to the learning capabilities of such students. Thirdly, the Eurocentric curriculum and campus cultures are also alien to such students which, again, create another barrier to their learning capabilities. Fourthly, such students largely come from poorly resourced households, and the state support in the form of National Student Financial Aid Scheme (NSFAS) has proven to be not sufficient to meet their needs, including food and accommodation. Not having their basic needs as human beings fully met, compromises their learning processes.

The notion of epistemic access is about overcoming the barriers to learning, as well as about creating conditions that are conducive to learning, thereby leading to the success of students in their higher education. This issue of *Higher Education Monitor* reports about a research project that was undertaken to understand the lived experiences of students from previously disadvantaged backgrounds in navigating the higher education space, and negotiating their ways through it to gain epistemic access, which then led to success in their studies. The research was conducted at six universities that represent comprehensive universities, historically white universities, historically black universities, and universities of technology. These universities are, University of Johannesburg, a comprehensive university; Universities of the Witwatersrand and Pretoria, historically white universities; Universities of the Western Cape and Limpopo, historically black universities; and Central University of Technology, a university of technology.

Interviews were conducted and focus group discussions were held with staff and final year Bachelor's degree students from previously disadvantaged backgrounds in the Faculties of Humanities and Natural Sciences at the six universities. The findings from the six case studies have more similarities than differences, suggesting that students from historically disadvantaged backgrounds encounter more or less the same issues whether they are enrolled in comprehensive universities, historically white universities, historically black universities or universities of technology. In the main, it is the sheer determination, resilience and initiative of individual students, motivated by the desire to break the vicious cycle of poverty and deprivation, that spur students from historically disadvantaged backgrounds to overcome the barriers and negotiate epistemic access for themselves. For some, the individual resolve, resilience and initiative are complemented by support from families and communities that they came from.

As reported in this issue of *Higher Education Monitor*, the study also recognised the critical role played by institutional initiatives to support both students and academic staff in their endeavours of seeking epistemic access. These institutional initiatives include extended curriculum, bridging and first time entering student support programmes, for students; and academic development programmes for academic staff, which seek to mediate the individual efforts of the students, and create conditions that are conducive to active participation of students in their learning processes. However, the study also recognises that possibly because of resource constraints, such initiatives and programmes do not reach all students and staff that can benefit from them. A strong recommendation is that higher education institutions should be supported by all stakeholders in their endeavours to expand the provision of such important support services to students and staff.

This issue of *Higher Education Monitor* is a good source for research, as well as for information than can be used to inform national policies, strategies and plans on expanding epistemic access for students from historically disadvantaged backgrounds, who are the majority within the higher education system in South Africa. With increased epistemic access for such category of students, the South African higher education system is likely to see concomitant increases in throughput, completion and graduation, and student success, in general. In other words, with increased epistemic access, the country is likely to witness a vibrant, efficient and healthy higher education system. It is therefore essential that stakeholders make time to read this issue of the *Higher Education Monitor*. Those who would like to comment or provide other forms of feedback on the contents of this publication are urged to do so by sending emails to research@che.ac.za.

The publication of this issue of *Higher Education Monitor* was made possible by the hard work of the teams of researchers that conducted the six case studies, led by the late Prof Michael Cross. It is these teams of researchers that generated the material published in this volume. Their hard work is acknowledged with sincere appreciation. Similalrly, the contributions of the editors, critical readers and reviewers are acknowledged with heartfelt gratitude. Their contributions were valuable in making the material readable, and therefore more accessible to a wider audience beyond academics and/or researchers in the field of Higher Education.

It is befitting that this issue of *Higher Education Monitor* is dedicated to the late Professors Narend Baijnath and Michael Cross who were the architects of the partnership between the CHE and the Ali Mazrui Centre for Higher Education Studies (AMCHES) at the University of Johannesburg. This partnership involved several projects, including the one that produced the material published in this volume. May the souls of the late Professors Narend Baijnath and Michael Cross rest in eternal peace.

Dr Whitfield Green

Chief Executive Officer

April 2024

## Acronyms and abbreviations

| | |
|---|---|
| **4IR** | Fourth Industrial Revolution |
| **ADC** | Academic Development Centre |
| **AEP** | Academic Excellence Programme |
| **AI** | Artificial Intelligence |
| **APU** | Academic Planning Unit |
| **BEd** | Bachelor of Education |
| **CCDU** | Counselling and Careers Development Unit |
| **CHE** | Council on Higher Education |
| **CHWC** | Campus Health and Wellness Centre |
| **CUT** | Central University of Technology |
| **DHET** | Department of Higher Education and Training |
| **DLL** | Division for Lifelong Learning |
| **DoE** | Department of Education |
| **DRU** | Disability Rights Unit |
| **ECP** | Extended Curriculum Programme |
| **EFF** | Economic Freedom Fighters |
| **FASO** | Financial Aid and Scholarship Office |
| **FH** | Faculty of Humanities |
| **FHES** | Faculty of Health and Environmental Sciences |
| **FMF** | FeesMustFall |
| **FSA** | Faculty Student Advisors |
| **FYE** | First-year Experience |
| **FYS** | First-year Seminar |
| **FYTP** | First Year Transition Programme |
| **GA** | Graduate Attributes |
| **HDI** | Historically Disadvantaged Institution |
| **HE** | Higher Education |
| **HEI** | Higher Education Institution |
| **HEMIS** | Higher Education Management Information System |
| **HPCSA** | Health Professions Council of South Africa |
| **ICT** | Information Communication Technologies |
| **M** | Minimum time to complete a qualification |
| **M+1** | 1 year after the minimum required time to complete a qualification |
| **M+2** | 2 years after the minimum required time to complete a qualification |
| **NAS** | Natural and Agricultural Sciences |
| **NRF** | National Research Foundation |
| **NSC** | National Senior Certificate |
| **NSFAS** | National Student Financial Aid Scheme |
| **PMI** | Priority Modules Index |
| **PPR** | Progression and Pass Rates |
| **PsyCaD** | Centre for Psychological Services and Career Development |
| **PUA** | Pre-University Academy |
| **RAU** | Rand Afrikaans University |
| **SAQA** | South African Qualifications Authority |
| **SASCO** | South African Students Congress |
| **SCA** | Student-Centred Approach |

| | |
|---|---|
| **SI** | Supplementary Instruction |
| **SP** | Student Parliament |
| **SRC** | Students Representative Council |
| **STEM** | Science, Technology, Engineering and Mathematics |
| **UGES** | Undergraduate Experience Survey |
| **UJ** | University of Johannesburg |
| **UL** | University of Limpopo |
| **UN** | University College of the North |
| **UoT** | University of Technology |
| **UP** | University of Pretoria |
| **UWC** | University of the Western Cape |
| **WIL** | Work Integrated Learning |
| **Wits** | University of the Witwatersrand |

# Chapter 1

## Access to Higher Education in South Africa: A Continuing Story

### Introduction

This study explored how students from historically disadvantaged backgrounds overcome challenges relating to epistemological access, and, in the process, encounter barriers to formal access, especially for students supported through the National Student Financial Aid Scheme (NSFAS) as highlighted in the six institutional case studies. An important finding is the persistent knowledge gap experienced by undergraduate students as they embark on their academic journeys. As discussed in Chapter 2 and throughout this volume, the disjuncture between students' learning experiences at under-resourced schools in poor communities and the demands of their academic undergraduate programmes, is an important factor shaping epistemic access and success. As a result, student agency and capability to counter school 'under-preparedness' and navigate their academic studies emerge as important factors enabling success. Likewise, the responsibility of universities to support students, especially in their first year of study, through academic development programmes and other interventions, is critical. Significantly, the study highlights that against all odds, many students from historically disadvantaged backgrounds in South Africa succeed in their academic endeavours. For example, the concept of compensatory capital (Cross and Atinde, 2015) that many historically marginalised students draw on, is still relevant. The six case studies on which this volume is based, provide common as well as unique answers that touch on the historical, contextual, intersectional, pedagogical and epistemological dimensions of student epistemic access and success in contemporary South Africa. The study on which this volume of *Higher Education Monitor* is based built on similar studies undertaken by the Council on Higher Education (CHE) (CHE, 2010), and the Association of African Universities (Cross, 2018).

Considering that this volume of *Higher Education Monitor* highlights challenges associated with the NSFAS to enable student access to higher education in South Africa, a brief discussion of the funding model is foregrounded. The NSFAS was established in terms of the National Student Financial Aid Scheme (Act 56 of 1999), with the purpose of providing financial aid to students from poor and working-class families. The NSFAS policy frameworks have changed over the years; however, it is important to note key differences in the pre and post 2018 policy frameworks: firstly, the funding threshold moved from R122 000 family income to R350 000 in 2018; and secondly, loans were phased out, that is, all new students from 2018 were on fully subsidised grants. That is, students qualifying from 2018 would not have to pay back to the state as the purpose was to provide free higher education to poor and working-class families. Overall, there has been little change in terms of who qualifies. In broad terms, students embarking on their first undergraduate qualifications or first time entrants (FTEN) into the university system, enrolled at public institutions only, in all fields of study, would be eligible. Initially only university students were catered for, with TVET students being supported from about 2012. *(Email communication from Dr Thandi Lewin, former Chief Director of DHET, responsible for student funding, 12 February 2024)*. However, the so-called 'missing-middle' students are excluded from NSFAS. These are students whose total family incomes place them above the NSFAS funding threshold, but their total family income is insufficient to pay university fees.

### Project aim

This project explored the experiences of successful undergraduate university students with a very specific background profile, that is, students who have suffered a considerable degree of marginalisation by virtue of being black, originating from poor families and communities, and who did their school education at relatively underprivileged schools in rural and township areas.

## Key questions

The project set out to address the following main questions:

i) How do students with the above profile negotiate their epistemic access and success within a diverse and rapidly changing university environment?

ii) What individual, institutional or collective resources (cultural and/or material) do they resort to in the process?

iii) And how do institutions mediate this process?

In seeking answers to the above questions, the following five aspects of the interface of student agency and a university's cultural web were explored:

- Experiences that might have enabled these undergraduate students to develop coping mechanisms, self-reliance, perseverance, self-determination, adaptability and flexibility in the choices they made to enable academic success.

- The dispositions and pre-dispositions developed in students' past lives that enabled them to adapt their *habitus* to the university environment.

- The institutional memory (histories, legacies, traditions, norms, values and ethos) that the dominant culture tends to privilege, discourses and assumptions as well as related institutional policies and practices, which form the basis of routine processes of a university's academic and student practices.

- Effects of the changes introduced or being introduced with the advent of the Fourth Industrial Revolution (4IR), 21st century skills, the decolonisation movement, the Covid-19 pandemic, and the ways in which these influenced student academic performance and throughput rates.

- Students' diverse university experiences of, on the one hand, racism, xenophobia, cultural isolation, crime, sexual harassment and gender-based violence, and on the other, generally positive academic and social interactions, enabling technological and human mediation for scholarly engagement.

## Rationale and motivation

Since the demise of apartheid, South African higher education institutions have undergone considerable changes in the profile of staff and students and within their institutional environments. "Black students from diverse social milieus, were admitted according to a more relaxed selection procedure" in the early 1990s (Cross, 2018, p. 25). Black student numbers at the University of the Witwatersrand (Wits), for example, grew from 17 884 in 1994 to 23 232 in 2005 (Cross, 2018, p. 25). This marked a continuing trend with Black African student enrolment at public universities growing from 446 946 in 2005 to 820 619 in 2018 (CHE, 2022, pp 96-100). While these changes have enabled unprecedented formal access to higher education, a major challenge remains the question of epistemic access, which entails issues of academic success measured through student development, throughput and retention. More recently, following the introduction of free higher education for students from families earning below a minimum threshold income, the focus has shifted to throughput issues, such as low graduation rates, high dropout rates and general academic underperformance.

## Discussion of key concepts

### *Epistemic access*

With the provision of free higher education for students in need of financial support in South Africa in 2018, it was assumed at the outset of this project that the question of formal access had been significantly addressed; and that it is the question of epistemic access within a framework of epistemic justice that necessitates more attention. To begin with, the project recaptured Morrow's (1994, 2009) distinction between formal and epistemological access: Formal access implies the physical entry into the university system, whereas epistemological access is a construct that allows an understanding of the academic experience of students; it is about "learning how to become a participant in an academic practice" (Morrow, 1994, p.40). Epistemological access requires that students understand how the institution operates or 'thinks', how students take initiative and responsibility – agency – to gain entry into the rules of the trade in academic practice; and how students search for and work with knowledge. Whereas historical and institutional conditions might assist or hinder one to learn by oneself, it must be done by the individual (Morrow, 1994). Although the student is necessarily an agent in his or her own epistemological access, he or she cannot decide which knowledge must be learnt or alter curricula or evaluate his or her achievements (Morrow, 1994). Morrow's (1994) conceptualisation of epistemological access can be interpreted as placing the onus on the one granted formal access to become a participant in academic practice. Jansen's notion of pedagogic distance emphasises the role of the institution and its responsibility in ensuring epistemic access; as well as how knowledge is organised, and how its value, politics and power all impact on epistemic access (Jansen, 2001, cited in Cross, 2018, p.15 and p.47).

Gamede's conception of epistemological access can be linked to the rise of the decolonisation movement that would disrupt South African higher education from 2015 onwards, which critiqued, among other issues, the lingering Eurocentric curriculum and white-dominated institutional cultures (Adebajo 2020; Ndelu, 2020). Gamede argues that, on the one hand, students are being granted formal access due to the economic and political mandate to transform, and on the other, they are meant to gain the knowledge provided by the institutions into which they are admitted. The culture of these institutions, however, goes unchallenged and remains relatively stable (Gamede, 2005).

This project, therefore, focused on individual responsibility, as well as the role of institutional mediation (through academic and non-academic support mechanisms, and availability of resources and facilities) and institutional responsibility; thus, both individual and institutional responsibility are seen as critical to epistemic access. While previous studies were driven primarily by immediate policy concerns, this study sought to stretch its epistemological and theoretical boundaries for a better understanding of the complexity of the phenomenon of epistemic access with reference to the individual experience of students who have suffered higher degrees of marginalisation at family, community and school levels, while providing a basis for a more systematic theorisation within the research niche of epistemic access and justice. Epistemic access, building on the notion of epistemological access[1], involves both student and institution fully applying their responsibilities to achieve student success.

### *Throughput and success*

Throughput rates are calculated based on 'the number of first-time entry undergraduate students of a specific cohort[2] of a specific year who have graduated either within minimum time (M), or up to two years beyond the minimum time (M+1 and M+2), to the number of students in the baseline enrolments of that cohort' (CHE 2021, p.v). In other words, throughput is the extent to which students' complete qualification programmes. Throughput is indicative of students' engagement with academic knowledge and is thus viewed as a measure of academic success. In the context of higher education, success implies deliberate use of accurate plans, development and learning opportunities, to enable completion of academic goals (Cross, 2018). To this end, success is commensurate with the combined capability of the institution and the student to achieve and accomplish the academic goal of obtaining a qualification. In the context of the project in question, success was understood as students' academic or epistemic success in obtaining the qualification they had registered for; measured by throughput rates (see statistical overview in chapter three) and progressing to the final year of their qualification (as explored in the case study chapters).

1 In this document, a distinction is made between the terms epistemological access and epistemic access, although they have largely been used interchangeably in the literature.
2 A cohort is '[t]he first-time entry students in a given year who have enrolled for a particular higher education programme' (CHE 2021, ii).

At the beginning of the 21st century the throughput rate was generally considered to be low across the board in South African universities, especially for students from historically disadvantaged backgrounds (Carrim & Ouma-Wangenge, 2012). According to Boughey (2008, p.193), the number of Black students from a diverse range of social, cultural and linguistic backgrounds has increased on campuses across the country, so too have problems related to attrition and throughput rates. The CHE asserted that post-1994 attrition amongst white students was also high, albeit not as high, as amongst African and Coloured students (CHE 2013). At that time, the CHE explained the causes of low throughput as a combination of financial exclusion, lack of resources, as well as a lack of preparedness for higher education on the part of the students (CHE, 2010; 2013). The assumption was that students from marginalised or disadvantaged backgrounds are most at risk in achieving success at university.

### *Marginalised and disadvantaged*

The terms marginalised and disadvantaged are often conflated, for example, Cross (2018, p.155) states that students from historically disadvantaged backgrounds and marginalised communities are "those that by virtue of their race, gender, geographical location (rural, township or poor neighbourhood), have been historically marginalised socially and economically, … have historically been placed on the margins or periphery of the mainstream social and economic hierarchy". Cross's definition of historical disadvantage and marginality echoes the notion of intersectionality, suggesting that participants are not one-dimensional, and neither are their experiences. In South Africa, the triple oppression of Black women in terms of race, gender and class was evident, especially during the apartheid years. As far as it could be determined, intersectionality has however not been factored into the throughput rate and experiences of undergraduate students in South Africa. The concern of research and scholarly work in the 1970s and 1980s on student epistemic access shifted significantly to focus on students from disadvantaged backgrounds who were not able to gain formal access to any university in South Africa; resulting in an increased presence of financially disadvantaged or working-class students in historically advantaged institutions (HAIs), such as Wits, from the early 1990s (Cross, 2018). Reference is also made in this volume to 'first-generation' students, which refers to the first member of a family that is known to have studied at a university. In this volume, the term 'marginalised' will be used to encompass the notions of 'disadvantaged' and 'first-generation'.

## Methodology

A brief overview of the project methodology is provided with additional institution-specific details provided in each of the case study report chapters. The research followed a qualitative multiple case study research design with supporting quantitative data. The case studies comprised two faculties: humanities and natural sciences, or the closest approximation thereof, within a university. Case studies were conducted at six institutions, namely University of the Witwatersrand (Wits), University of Johannesburg (UJ), University of Pretoria (UP), University of the Western Cape (UWC), University of Limpopo (UL) and Central University of Technology (CUT). The six institutions were purposely selected to include students with varied histories, that is, some historically advantaged institutions (HAI), namely Wits, and UP, historically disadvantaged institutions (HDI), UL and UWC, a merged and comprehensive university, UJ, and a technological-oriented institution, CUT. Together, these universities provide an array of diverse experiences for the students from historically disadvantaged backgrounds.

Institutional profiles based on data collected from six datasets were as follows:

**Data Set 1:** Faculty profiles brought together data on the academic and administrative staff, curriculum, formal access arrangements for students, student numbers (size) of the faculty, and the broad philosophy of the faculty (mission and identity). This data was based on a combination of interviews with the faculty leadership/staff and the gleaning of relevant faculty documents.

**Data Set 2:** Faculty history with respect to student progression and pass rates (PPR) was statistically compiled for the period from 2014 to 2019. The statistical profile of PPR were specified by each faculty and disaggregated for specific programmes with traditionally high failure and dropout rates. The aim was to have a composite statistically based narrative for each faculty's PPR.

**Data Set 3:** Selected students were interviewed using a semi-structured interview protocol that covered the three research foci of the study (experience, engagement, effects) and the three cultural domains (institutional, academic, student) that framed the investigation. The student interviews were transcribed for both record-keeping and analysis purposes and form the most direct and qualitative case evidence for the students' encounters with their universities.

**Data Set 4:** Faculty administrative staff were individually interviewed to determine both the formal arrangements for access and service as well as the collective experiences of students' problems, needs, challenges and concerns from the point of view of the administrative staff. This data added another layer of evidence to explain experiences of the student-administration encounters and the extent to which this interface facilitates or frustrates academic progress.

**Data Set 5:** Faculty academics were interviewed to determine their understanding of the students' experience and their enumeration of the obstacles to student progression within the academic sphere. This data provided lecturers' perspectives on the students' encounters with the teaching and learning context of a particular faculty, and how lecturers identify the problems and their resolution in academic terms.

**Data Set 6:** Faculty reports consisting of in-house analyses, institutional surveys and studies of PPR problems, their causes and resolution, such as might be available in documentary form to the research team, were collected for analysis. Key activities entailed: (i) collecting and analysing statistics on student throughput and analysing and comparing these across the schools in the faculties; (ii) collecting and analysing copies of mission, strategy, policy and procedure documents at institutional, faculty and school level (where available); (iii) examining documents for underlying assumptions about access, retention and student throughput and how the institutions/faculties/schools addressed these.

### Sampling and interview logistics, data collection and analysis

Interviews were conducted with undergraduate students from the faculties of humanities and natural sciences during 2020 when the country was gripped by the Covid-19 pandemic. The target was 17 students from each faculty, totalling 34 student interviews per case study. The selection criteria included inter alia, socio-economic status (using NSFAS as a proxy and attendance at Quintile 1, 2 and 3 schools for families unable to pay schools fees), geographical location (township or rural), gender and race (prioritising Black African students). The interviews also included lecturers, course, faculty or department managers and administrative or support staff. Researchers thus aimed for an average of 45 to 50 interviews per case study. Breakdown by race, gender and place of residence was considered in the sampling process.

Interviews were conducted with final year undergraduate students and students in their second or third year if enrolled for a four-year degree, as well as academic and administrative staff in both the Humanities and Natural Sciences faculties. The interview targets in case studies were 17 students, 4 academic staff and 2 administrative staff for each participating faculty. Each case study chapter reports on the

extent to which these targets were met. For students, an additional condition to be included in the sample was that they receive the NSFAS bursary. This condition was applied to determine financial or economic marginality and served as a proxy for historical disadvantage. Four interviews were conducted with staff in support units at each institution, such as student finance, residence office, psychosocial development unit as well as the academic support unit.

The interviews were conducted by research coordinators (senior academics) with the assistance of fieldworkers (postgraduate students) based at each institution. The research project commenced at the height of implementation of a nation-wide lockdown in South Africa in March 2020, following the worldwide outbreak of the Covid-19, which influenced the data collection process. Consequently, to protect both researchers and participants, all interviews were conducted using either telephone, social media or online meeting facilities. There were a range of limitations about accessing participants and the use of the various platforms on which the interviews were conducted, including connectivity and network problems, power outages and the inability to observe body language as well as building rapport. The institutional document review comprised various documents in different case studies, including institutional and faculty reports. The details of interviews and institutional document reviews are elaborated on in each case study report. Each case study report provides an analysis and discussion of the data gathered at that institution. The findings presented by each case study are synthesised and reported in the penultimate chapter of this report. Quantitative data from the HEMIS are also included in this report as a backdrop to the case studies. The data include national, institutional and faculty overviews of student profiles, throughput and attrition rates of the institutions where research was conducted.

### Limitations of the study

While the study revealed rich experiences about the epistemic access and success of students from historically disadvantaged backgrounds, the findings were not without limitations. These are noted here to inform further research where applicable.

The fact that only students who managed to succeed or complete their academic programmes were interviewed suggests that there is no basis to establish whether the findings are unique to successful students. This was highlighted in some of the case studies. In this regard, the following points are worth noting:

- The main argument that emerges in the case studies is a coalescing of factors that can explain student success even though their exact interrelationship could not be determined; and
- The study was not able to determine which factors make more or less of a contribution to student success or whether one or the other is more central than the other. How exactly they intertwine or weave together to ensure students' success can thus not be extrapolated. Further research into students' academic success could thus be more intentional about which factors contribute to students' success and under what conditions.

Another limitation of the study was that although the notion of 'compensatory capital' is helpful in understanding the epistemic access of disadvantaged students, the gap is that it overlooks diversity within disadvantaged students themselves, resulting in over-generalisation of the concept, a point that is taken up in Chapter 10.

While the study referred to the role of gender, none of the case studies highlighted any gender specific findings and its impact on student epistemic access and success. Gender is an important intersecting factor which subsequent studies should focus on.

Additionally, while the issues of Covid-19, 4IR, curriculum decolonisation, impact of protests and 21st century skills were raised in terms of the rapidly changing university environment, responses to these issues were limited.

Gaps were noted in the current HEMIS data on which Chapter 3 is based. While race continues to appear to be an important identity marker

regarding marginalisation and disadvantage, other factors are important. Geographical origin (province and rural-urban), school quintile and access to university accommodation also contribute to explaining students' formal access to higher education in this study. These in turn also shape their capability to engage with the knowledge project and participate in academic practices on campus. Unfortunately, the HEMIS data does not include these variable and therefore does not allow for enrolment and throughput data to be disaggregated from a broader matrix with the potential for deeper, more nuanced analyses. With this limitation in HEMIS data a holistic understanding of the extent to which redress has occurred will remain a one-dimensional exercise.

Although not strictly a limitation, methodological challenges imposed by the impact of the Covid-19 pandemic in 2020 when interviews were conducted, should be noted. Since students were not on campus and interviews had to be conducted online, researchers found it difficult to secure appointments with students, who faced both social and technological challenges, such as access to data and connectivity in rural and some township communities. Similarly, research teams had difficulty accessing university personnel to gain access to relevant documents and reports since staff were working from home due to the lockdown.

### Outline of the Higher Education Monitor No. 16

Chapter 2 highlights key perspectives, their underlying assumptions and implications with reference to the individual, social and institutional factors that affect successful student achievement in higher education. Chapter 3, the statistical overview of enrolment and throughput, presents national, institutional and faculty PPR compiled from HEMIS undergraduate cohort data of the students who registered at participating institutions for the first time in 2014 and tracked to 2019. It should be noted that this cohort of students is pre-NSFAS full bursary and constitute a different cohort to those interviewed – the reason for using this data is the availability of the latest HEMIS data as is explained in chapter 3. Chapters 4 to 9 are case studies of the six participating institutions: the Central University of Technology (CUT), University of Johannesburg (UJ), University of Pretoria (UP), University of the Witwatersrand (Wits), University of Limpopo (UL), and University of the Western Cape (UWC), respectively. These chapters provide historical overviews of the institutions, descriptions of their research methodology and challenges, and an analysis of the main research findings largely through a thematic discussion around the study's research questions. Chapter 10 is a synthesis of the case studies highlighting key findings from the case studies and policy implications. Chapter 11 provides high level conclusions and recommendations for the higher education sector.

# Chapter 2

## Student Epistemic Access: The Dynamic Interplay between Agency and Institutional Mediation

### Introduction

This chapter maps out and critically examines the main opportunities and constraints of 'student epistemic access' and 'success' within the context of South African higher education. It highlights key perspectives, and their underlying assumptions and implications with reference to the individual, social and institutional factors that affect student success in higher education. More specifically, it considers intersecting domains of the student and institution, such as the academic and cultural, in terms of how these domains interface with the individual agency of the student (as the participant) and the institution (as the social and academic context) within which the student learns to become a participant in the academic practice at university. As Tinto (2014, p.6) explains:

> *Improvement in institutional rates of student success does not arise by chance. It is not simply the result of good intentions; although good intentions are clearly a requirement, improvement in rates of student success requires more. It requires an intentional, structured and coherent set of policies and actions that coordinate the work of many programmes and people across campus; actions that are sustained and scaled up over time and to which resources are allocated. There is no magic cure to improvement. It simply takes time and sustained effort.*

Thus, the key argument in this review is that epistemic access and success are not confined to student agency, but are far more complex, encompassing collaborative efforts of multiple stakeholders, and their responsibilities and effective engagement with the institutional, academic and student cultural domains to access knowledge. Epistemic access and success occur where specific domains at student and institutional levels enable, and do not constrain, access to knowledge. While the review draws from different scholars, the chapter builds on the work of the late Professor Michael Cross, who made a significant intellectual contribution to a nuanced understanding of epistemic access and success in South African higher education.

### Historical background and context

#### *Wave of limited access to higher education in South Africa: Dismantling barriers*

Higher education in South Africa traces its roots to the establishment of the historically white universities, including the University of the Witwatersrand in 1922 and the University of Pretoria in 1930 (CHE, 2010). Under apartheid in the early 1960s, in keeping with the vision of a separated society, the state created several colleges to cater for 'other' race groups, including the University College of the Western Cape for Coloureds and University of Durban-Westville for Indians. Similarly, a number of universities were established for Africans, such as the University of Fort Hare and University of Transkei. Thus, in terms of the apartheid vision for education, higher education was segregated into institutions reserved for white South Africans and institutions tasked with providing limited tertiary education to those who were not classified white (CHE, 2010). Not only was the resourcing of these institutions inequitable, but the range of programmes offered reflected assumptions about the kind of careers for which students of different races were being prepared, and while the recent institutional mergers have combined institutions across these boundaries, there are still significant differences in the resourcing, skill levels and outputs of those institutions that were historically white (the historically advantaged universities or HAUs) and those that served other racial groups (the historically disadvantaged universities or HDUs) (CHE, 2010, p.1-2).

The era between 1970 and 1980 is significant for epistemic access and success as many doors to higher education, which had previously been closed to historically marginalised students in South Africa, started admitting these students. During the 1970s, the four English-medium universities, Wits, University of Cape Town, Rhodes University and University of Natal, driven by a liberal ideology, called themselves 'Open Universities' and began opening their doors. The apartheid state had little control over these universities, which enjoyed substantial autonomy (Cross, 2015).

The Afrikaans-medium universities such as Stellenbosch University, Rand Afrikaans University, University of Pretoria, Potchefstroom University, University of the Orange Free State, with University of Port Elizabeth being dual-medium (English and Afrikaans), occupied a unique space as they benefitted from a discriminatory funding policy under apartheid. Nevertheless, like the 'Open Universities', these specific universities rejected any form of state interference in their institutional affairs (Lange, 2017). The state did, however, have control over the historically black universities, which were established from 1959 onwards. University of Fort Hare was the first to be established in 1959, followed by University of the North (today's University of Limpopo) (1960), University of Zululand (1960), University of Durban Westville for Indian students (1960), University of the Western Cape for Coloured students (1960), University of Transkei (1977), University of Bophuthatswana (1980), and University of Venda (1982) (Fiske & Ladd, 2004, p.204). During this wave, epistemic access was not an issue of concern. In 'Open Universities' there was no challenge because of the demographic profile of students who had access to those universities. The students, a privileged few, had the necessary social and cultural capital required to meet the academic demands and challenges of the elite institutions. In essence, the students matched the institutional culture that characterised those institutions (Cross, 2018).

### *Diversifying formal access into higher education: Into the democratic transition of the 1990s*

The early 1990s was the period in which higher education in South Africa was focused on the notion of democratisation of knowledge and access of all students to institutions of higher education. This was enabled by the political climate of the day with its emphasis on the transition to democracy, and the fundamental goals to achieve access, equity and redress of inequalities. The report of the National Commission on Higher Education (NCHE,1996), Education White Paper 3 (WP3) (Department of Education (DoE), 1997), the Higher Education Act of 1997 and the South African Qualifications Authority (SAQA) Act of 1995, that created the National Qualifications Framework (NQF), were produced as policy frameworks to address these goals. Thus, the wave in the early 1990s sought to diversify access to all students. The debates at the time bordered around the relationship between equity, redress and quality in South African higher education, to enhance inclusion and improve the quality of participation of under-prepared students (Griesel, 2004). It should be noted, however, that democratisation of knowledge and access are still a focus of the higher education sector in South Africa.

### *The moment of under-preparedness: 'Access without success'*

The end of the 1990s saw increased broad-based formal or physical access into higher education, but with limited success, characterised by student under-preparedness. The biographies of students from historically disadvantaged backgrounds, mainly from black townships and rural communities, accessing higher education reported a lack of the necessary and adequate social and cultural capital to meet the school to higher education transition challenges (Czerniewicz & Brown 2011; Fataar, 2012; Jones *et al*. 2008; Naidoo, 2004). It was during this period that the concept of epistemological access was coined by Morrow (1994), which he later elaborated as the process of "learning how to become a successful participant in the academic practice of a tertiary institution" (Morrow, 2009, p.78). Morrow (2009) argued that it requires, inter alia, an understanding of how the university operates or 'thinks', and the use of students' own initiative and individual responsibility, to engage with the practices of searching for and working with knowledge made available in higher education institutions.

### *Wave of tackling under-preparedness and the deficit model*

Starting in the late 1990s, with increased vigour post-2000, the under-preparedness of students prompted a focus on the transition from schooling to university in a bid to bridge the articulation gap between schooling and higher education. Posited within the context of the historical, racial and geopolitical structure in South Africa, under-preparedness has been associated with 'weak', mostly African, students perceived to display a lower level of cognition requiring remedial interventions. It also describes the inability to grasp higher learning, and those affected are seen as not being "university material" (CHE, 2013, p.58). Views of under-preparedness have been criticised as

representing a 'deficit' view of students that emerges when universities opened access to students from marginalised communities. The presumption of under-preparedness has resulted in a long-standing assumption that students' lack of success should be attributed to them rather than the institution. Under-preparedness is multi-faceted, involving not only subject knowledge but cognitive, epistemological, affective, and socio-cultural dimensions (CHE, 2007; Scott, 2009).

Induction was used as a strategy in addressing under-preparedness to enculturate students into the academic culture of universities. McInnis *et al.* (2000) viewed this as a necessary transition step, as assistance and support was required to facilitate the acculturation process for students entering higher education for the first time, particularly for those who had attended poorly resourced schools with a track-record of poor performance. Research on student unpreparedness, academic support, bridging programmes, including new approaches to student selection, flourished (CHE, 2010). These changes led to the proliferation of institutional climate and culture surveys and studies on different aspects of institutional transformation (for example, Cross *et al.*, 2003; Van Zyl *et al.*, 2003), as well as throughput and retention studies (Alence, 2007; Van Zyl, *et al.*, 2003).

To bridge the gap between schooling and higher education, support was provided to under-prepared students in the form of extended programmes. Students who were not ready to negotiate the mainstream curriculum were identified and were given extra support through extended programmes to enable success. Lange (2017) has argued that the restructuring of programmes provided extra scaffolding, especially in the areas of language and academic literacy, to enable students to be in a better position to successfully master university knowledge. The design of extended programmes was, however, critiqued for its emphasis on a deficit model where students and their families were framed as lacking, and therefore in need of 'fixing' (Smit, 2012). Boughey argued further that the model had its origins in the erstwhile education development ideology that created it (Boughey, 2007). The burden of responsibility had shifted to the institutions from the early 2000s (CHE, 2022, p.80), and not students, hence the need for the institutions to transform. As part of this shift, 'academic support' changed to 'academic development' (AD) (Boughey, 2005). The AD movement sought to change the perception of students being 'deficient', to focus on how institutions could enable their epistemic access.

As a response to the inadequacies of the 'deficit' view that results in blaming students instead of structural problems including the schooling system, the term 'articulation gap', has been introduced into the debate to describe a mismatch between the schooling system and higher education expectations (CHE, 2013; DoE, 1997; Scott, 2009). The term 'articulation gap' suggests a structural problem comprising discontinuity between secondary and higher education in South Africa. Seeing this problem as an articulation gap (DoE, 1997), rather than student under-preparedness, opens possibilities for positive action within higher education, because a gap can be closed from either side (CHE, 2013, p.62). While the discourse or narrative of either under-preparedness or an articulation gap does not provide a lens with which to view or analyse student success and epistemic access, successful students' experiences could shed light on how to mediate so-called under-preparedness.

### *The Cultural Wave: Institutional efforts beyond academic programmes (2010-present)*

Beyond academic programmes, institutions attempted to become a more culturally friendly space to a diverse student body, as highlighted in the earlier waves (see, Badat, 2010, Cross *et al.*, 2010; Inglis, 2005). Attempts to address institutional inadequacies manifested in the Africanisation of institutional artefacts such as songs sung on graduation days, dance, emblems and the change of names of buildings. Cross and Atinde (2015) refer to the 'pedagogy of the marginalised', a term they use to describe cognitive processes of students' experiences, such as the ability to apply their assets and skills to learning in new situations. The insight from this assertion is that it is not only about possessing assets, but also the ability to internalise them and use them appropriately, to cope within the system until one succeeds (Cross & Atinde, 2015). To explain the individual conditions of the possibility of epistemic success, Cross and Atinde coined the concept of 'compensatory capital' to explain how students who suffered marginalisation could utilise their social capital to achieve academic success (Cross, 2018; Cross & Atinde 2015).

### Student cultural domain: student agency[3]

#### Compensatory capital

Research (see Cross & Atinde, 2015; Cross, 2018) highlights the importance of 'compensatory capital' as the bedrock of historically disadvantaged students' agency in navigating epistemic access and success. Student responsibility, capability and other factors discussed below, constitute key dimensions of 'compensatory capital', drawing on Bourdieu's concepts of habitus and social capital for epistemic access and success, which were seen to be possessed by privileged students (Czerniewicz & Brown 2011; Fataar, 2012). The notion of compensatory capital (Cross & Atinde, 2015) highlighted the ability of students from disadvantaged backgrounds to draw on their social capital of support from family, friends and communities in disrupting the deficit model, thereby highlighting their agency in gaining epistemic access to higher education. Compensatory capital can thus enable students to work together as a group drawing on communal forms of life in the village, where people assist or support each other (Cross & Atinde, 2015). On the contrary, compensatory capital could refer to the institution's inability to enable students' epistemic access (Jansen, 1998), but students themselves possess other coping mechanisms they could use to be part of the practice at the institution, drawing on their home and community experiences. Ultimately, compensatory capital could facilitate conditions of possibility for epistemic access by both students and the institution.

While the concept of compensatory capital is important in understanding the possibility of epistemic access and success for disadvantaged students, much of the literature focuses on students who are successful in terms of developing a pedagogy of survival predicated on skills, attitudes and predispositions such as the ability to consult, self-reliance and perseverance (Cross & Atinde, 2015). However, not all disadvantaged students have recourse to compensatory capital, which could lead to the over-generalisation of the concept's value. Nevertheless, the notion of 'compensatory capital' offers a useful lens in the South African context, providing a theoretical construct for exploring key aspects of students' agency, such as capability and responsibility. Student agency is central to epistemic access as it is the student's role and individual responsibility to engage in the knowledge practice offered by institutions of higher education.

#### Student capability

Capability is one attribute of learning that enables one to become a participant in academic practice (Nussbaum, 2020). The capabilities approach is a normative approach to human welfare that foregrounds the capability of persons to achieve their well-being rather than only on their right or freedom to do so. Spearheaded by Amartya Sen (2008), the approach offers a conceptual alternative to stereotyped images of academically deficient and struggling students by focusing on evidence of students' resilient responses to adverse conditions (Walker & Boni, 2020). It thus resonates with Cross and Atinde's notion of compensatory capital discussed above. The core focus of the capability approach is on what individuals can do despite facing adversity. The capability approach has three tenets that constitute its core, namely, functioning, agency, and capabilities.

By functioning, Sen (2008) means 'beings and doings'. He argues that living may be seen as a set of interrelated functionings. They are the states and activities constitutive of a person's being. For example, functionings may refer to elementary things, such as being healthy, having a good job, and being safe, to more complex states, such as being happy, having self-respect and being calm. In the context of this report, capability may be applied to the freedom to enter higher education while functioning to being registered at a higher education institution. For Sen (2008), functionings are crucial to the capability approach; capability is conceptualised as a reflection of freedom to achieve valuable functionings. In this study, the concept of 'functionings' is invoked to analyse students' experiences from disadvantaged backgrounds and their capacity to succeed at university. The concept illuminates facets that constitute students' survival. "Even when the functioning looks broadly similar and appears fair, the underlying opportunities for achievement and future opportunities ... may be unequal" (Walker, 2018, p.559). Both functioning and capabilities are impacted by conversion factors - often social and institutional conditions and structures - which people use to convert their resources (Nambiar, 2013). Functioning thus refers to the actual experience and behaviour while capabilities capture the opportunities people have and their ability to tap into the opportunities.

3 It should be noted that due to the need to consolidate discussions regarding theory and concepts in the report, material from chapters 4, 5 and 6 have been incorporated into chapter 2, for example on the Capability Approach.

While Sen foregrounds the individual, the notion of 'agency freedom' (Sen, 1992), 'capabilities are also realised relationally and socially' (Walker, 2018, p.562). Capability drives and explains the functioning (Sen, 1992; Teece, 2017). It concerns student agency and the underlying features of the agency, including student awareness and ability to tap into their environment for whatever opportunities and support provided, and it also refers to the ability to avoid any toxic or unconducive influences. As much as the importance of environment shaping one's exposure to opportunities, agency mediates and translates external stimuli to internal responses. This is particularly critical for the historically disadvantaged students as their environment is, by definition, challenging (Case, 2015). Nussbaum (2000) argues that capabilities denote a person's opportunity and ability to generate desired outcomes, considering relevant personal characteristics and external factors. It is a combination of the individual capabilities and the external factors that enable or inhibit a person's ability to succeed. The significance of capability is the 'freedom to achieve'. The capability approach argues that freedom to achieve well-being amid stressful circumstances is a matter of what people can do and to be, and thus are able to lead. This tenet of the theory is appropriate for students who experience trauma and stress, because instead of succumbing to stressful conditions, they choose to soldier on and thus choose to achieve.

Capability is thus understood as opportunities to enable achievement (Kaufman, 2006), through personal, social and environmental conversion factors (Crocker & Robeyns, 2009). Supportive environments can enhance capability and unsupportive environments can impede it. External support mechanisms, such as family, siblings, community, and peer support may be needed to aid the student in becoming a participant in the academic practice of an institution. Evans (2002) and Cross (2018) saw collective capability as empowering since individual students can share their social capital to face the challenges of campus life. As will be seen, several of the case study chapters draw on the capability approach in their analysis.

### Student responsibility

Student responsibility also plays an important role as an attribute of epistemic access. Cross (2018) argued that responsibility led to increased opportunities for self-development, enrichment and fulfilment. The more responsible the student is the more the opportunity for engaging in the practice of searching for and working with knowledge. Students could understand how the university operates or 'thinks' and use their own initiative and individual responsibility to engage with the practices of searching for and working with knowledge. However, all stakeholders need to be responsible and capable. While the student's responsibility is key for them to understand how institutions operate, it is equally important that institutions demonstrate an acute understanding of how students think and operate.

Individual and personal adjustments, as elements of a student's responsibility, have been found to enhance student access and success in higher education (Cross, 2018). Individual adjustments are regarded as supportive assets and constitute aspects of how they can do their own learning. As students move from school to university, they make academic, geographical, administrative and personal adjustments (Cross, 2018). In addition, responsibility helps students to take charge of and control their learning by making the necessary personal adjustments in the way in which epistemic access and success could be promoted.

### Student background

Student background is another factor that impacts epistemic access. Cross (2018) understood the student's background as the determining factor in terms of the extent to which a student can participate in a practice. Student background encompasses many elements of social life such as the culture, socio-economic status, family, community, race, religion, gender, ethnicity as well as nationality or citizenship. According to Cross (2018), for students from disadvantaged backgrounds, family and community support can compensate in some ways for under-preparedness during schooling and aid their epistemic access at university. It is important, therefore, not to overlook the fate of those either without family support or who lack individual capacity when epistemic access matters are interrogated.

The student's financial and personal circumstances constitute an important part of student background, which could negatively impact student experiences and their performance. For example, Cross (2018) noted that financial problems and lack of accommodation close to campus can exclude disadvantaged students from learning to become participants in the academic practice. Thus, background constitutes social

processes embracing "skills, abilities, pre- intentional assumptions, attitudes, practices, capacities, stances, perceptions and actions" (Broekman & Pendlebury, 2002, p.291) which can shape students' experiences of the institution and life on campus.

Student background factors can combine with capability and responsibility to inform the knowledge, skills and dispositions with which they enter universities. Students from disadvantaged backgrounds are likely to experience campus life in unique ways as compared to students from advantaged backgrounds. Academic support and services are insufficient to build a dynamic institutional culture. Opportunities are also needed for students from different backgrounds to interact and negotiate "shared meaning, codes, norms and values" (Cross, 2018, p.22). For example, the background experience of seeking knowledge from the elders for disadvantaged students could be utilised to consult lecturers and other senior students to enhance their learning activities.

**Under-preparedness/unpreparedness as an issue of epistemic access and success**

While student agency and ways in which it enables epistemic access and success are evident, the literature also reveals, as was noted earlier, that under-preparedness, as a constraining factor, is often attributed to the 'lack' of schooling in preparing learners to be university students (e.g. Cross, 2018). One aspect of the problem points to the poor quality of schooling in rural contexts and townships (Nelson Mandela Foundation, 2005), which results in significant knowledge gaps.

The issue of student unpreparedness for historically marginalised students is highlighted in the Higher Education Act no 101 of 1997, pointing to a need to achieve redress and equity in access by requiring universities to remedy the under-preparedness with supportive measures. The acceptance of an unpreparedness narrative by institutions, over which they presumably have no control, could be regarded as deeply deficit-driven and lacking in rigour. Institutions have policies that endeavour to admit students who have the potential to succeed (Cross, 2018), yet exactly who that includes, and on what pedagogic or other grounds the criterion 'potential to succeed' is met, appears to be inadequately addressed in the literature. Moreover, when and how the 'potential to succeed' translates into under-preparedness is not explained in the literature. It should also be noted that, while much scholarly work claims a disjuncture between school preparedness and what is expected at university, there is little empirical evidence to support this. One related study conducted at Stellenbosch University questioned existing notions of under-prepared students, stressing that students in the Faculty of Arts and Social Sciences, irrespective of their backgrounds, confirmed the significant challenges that entry into the academic community posed for them (Van Schalkwyk, 2008). Van Schalkwyk (2008) proposes that future research includes reviewing the extent to which first-year curricula create opportunities for the acquisition of academic literacy for a diverse student population.

Deficit approaches are not limited to individual students, but also to their contexts. These contexts are described as producing identities that are 'other' to the university environment. Boughey (2008), drawing on Halliday's theory of 'Systemic Functional Linguistics' demonstrates that "non-traditional students' contexts are very different from the university. The actions undertaken by students to learn are, from this perspective, related to their identities as individuals outside the university and how they understand outside contexts" (Boughey 2008, p.198). While this might not be a deficit approach in that it places no responsibility on the part of students, such explanations position aspects of students' lives at the periphery of university culture. Explanations of phenomena in the education system framed within an acceptance of 'non-traditional' students, concurs with the propositions of Bourdieu and Passerone (1990) who illustrate how access to higher levels of education is dependent on legitimised and legitimising arbitrary cultural practices. Put simply, it means a situation in which students would immerse themselves in the official domain and conform without question to the values and standards, including the institution's curriculum, as they cannot identify any domination in the practice. Students from disadvantaged backgrounds are thus likely to enter higher education at a disadvantage, needing to prove themselves as worthy and legitimate participants in that space.

Research into higher education has experienced a shift in the past couple of decades from deficit analyses of student preparedness to exosystemic analyses that interrogate how structural conditions enable and constrain educational outcomes for disadvantaged students (Gorski 2011; Harper 2010; Hurst 2015; Kim & Hargrove 2013; McKay & Devlin 2016; O'Shea *et al.*, 2016; Pym & Kapp 2013; Reed *et al.*, 2019; Smit 2012; Valencia 2010).

Instead of asking whether students are academically and socially prepared for higher education, critical scholars have asked how institutions and individuals can work collaboratively to enable success for students from historically disadvantaged backgrounds. Such conceptual focus shifts a discourse of student blame to a wider structural analysis of intersecting factors that leave students marginalised (Williams *et al.*, 2019).

The debate on widening participation and equity in higher education has developed to include a nuanced, intersectional critique of the deficit approach. Recent debates in higher education propose alternatives and focus on socio-economic inequalities alongside students' need for institutional recognition. Scholars investigate student experiences using multidimensional analyses that examine how race, class, gender, disability, language, culture and other identity markers impact on an individual's freedom to participate in higher education. Scholars who challenge the deficit approach illustrate that students from lower socio-economic backgrounds demonstrate high levels of determination and motivation to succeed, perform well despite challenges, actively seek help and are independent learners, given their experience of tough public-school settings where little support is offered (McKay & Devlin, 2016). As part of finding alternatives through a multidimensional approach, scholars also embrace agency, student empowerment, student access to resources and student resilience (Daniel 2018; Harper *et al.*, 2018; Portnoi & Kwong 2019; Martinez-Vargas *et al.*, 2019). A focus on student agency foregrounds the creative, transformative actions that students enact to navigate challenges and limited resources, and the everyday acts of resistance that enable success despite systemic constraints.

The review now turns to the important role of institutions and their practices, overt or hidden, that mediate student epistemic access and success.

### Institutional cultural domain

As important as student agency is, the institutional cultural domain plays an equally important role in student access and success. Universities are "prior to individuals", says Cross (2018, p.53), meaning that they are established before students enrol, and they are organised into faculties, schools and departments that facilitate student attainment of academic qualifications. *"Institutional culture sets the boundaries about what, how, by whom and for whom teaching and academic practice occurs and in what environment"* (Cross 2018, p.17 emphasis in original). In essence, institutions come first before students, and they set the tone for practice. It could be argued, therefore, that students have little input into the organisational structure of institutions and when they come in, they must negotiate the environment to learn to be active members of the practice. According to Cross (2018), institutions of higher education have three main domains, the official, academic and social, that map out the context of practice, and inform and shape the student's experience at the university.

### The official domain

The official domain addresses the official re-contextualisation field (following Bernstein, 1990), which draws attention to the construction of new knowledge from previously dominant discourses of knowledge production. In South Africa, recontextualising in the official domain was deemed imperative because of the exclusion and inequalities that have previously been confronted by historically disadvantaged social groups (Cross, 2018). What is being recontextualised is the issue of exclusion of (historical) social groups, to consider diversity, social justice, and equality.

Bernstein defined the official re-contextualisation field in the light of "specialised departments and sub-agencies of the State and local educational authorities together with their research and system of inspectors" (Bernstein, 1990, p.192). In the South African higher education context, this refers to stakeholders who manage the departments as administrators and support staff, responsible for academic development. Cross (2018) added that it includes the policies, rules and guidelines regulating campus life. Besides the internal, the official recontextualising field recognises external influences on academic practice within institutions (Cross, 2018). "It is through the directives and expectations of these structures such as the SAQA, the CHE, the National Research Foundation (NRF) that the university and, in particular, student life is regulated, steered or controlled" (Cross, 2018. p.31). Thus, the nature and scope of the official domain looms large in the experience of students at higher education institutions.

### Institutional facts and constitutive rules as institutional culture

Institutional facts and constitutive rules are framed from the official domain and are aspects of institutional life, against which daily lives on campus are conducted. They create the very possibility of a particular form of practice, rules and facts, which do not depend on students' backgrounds (Cross, 2018). For example, keeping quiet in the library is part of a constitutive rule mediated to students at the institution. While such rules apply to all students, both advantaged and disadvantaged, student background could have a negative or a positive influence on how the students interpret the institutional facts and constitutive rules. A student who does not keep quiet and study in the library might not be successful within the practice, compared to one who abides by the constitutive rules. In essence, a student has a role to play in assimilating with institutional facts and rules, to access the practice, while the institution has the role to mediate the institutional facts and constitutive rules to the student. A related problem is that induction programmes for newly enrolled students do not always highlight the constitutive rules, which are only pointed out to students once they have breached them (Cross, 2018). It is not only about having institutional facts and constitutive rules, but it is the extent to which students are made aware of them that helps enable epistemic access and success.

### Induction as cultural practice to epistemic access

When students enter the university, they are inducted into the system of higher education and learning to become participants in the academic practice of a particular institution. Induction is not an event but a process relating to all transitioning related to being a student, be it academic, social, cultural or personal. It is the first experience of something that is mostly unknown, and the process contributes to how students gain membership to the university community, including both guidance and academic enculturation (Cross, 2018). The student and other stakeholders at the university, including academic staff, administrative staff, support staff and peers, may interact among each other during induction and interactions could have a positive or negative impact during the time of induction and ongoing experiences at the university.

Jansen (2001) viewed induction as central, and argued that, "how it is organised, its value basis, its politics, and its power" (Jansen, 2001, p.2-3) is critical for epistemological access. Cross (2018) agreed with Jansen that peer support contributes to the induction process and enables the students to learn to participate in academic practice. Induction differs from one university to the other. Some institutions, such as Wits, have developed comprehensive policy instruments and constitutive rules and procedures, course structures, assessment techniques and processes, all befitting a healthy and productive campus and academic climate (Cross, 2018). Thus, the way in which students are inducted into university life is important because the transition from schooling to higher education is a critical period for students, particularly for those from disadvantaged backgrounds, who find the environment from which they come very different from the university one - compounded by unforeseen events, such as pandemics.

### The pedagogic or academic domain

The pedagogic domain is what is most referred to as the 'academic life' at university and is fundamental for epistemic access and success. Bernstein (1990, p.198), building on the notion of the pedagogic recontextualising field, draws attention to the "principles and practices regulating the circulation of theories and texts, from the context of their production or existence to the contexts of their reproduction". Bernstein's theoretical understanding of the pedagogic domain is relevant in that it provides academics with a framework to understand the production of knowledge, and how knowledge could be recontextualised in the formal scientific and theoretical knowledge rituals of universities. Furthermore, the framework stresses the importance of recognising the prior experiences of students from disadvantaged social contexts, which could be utilised for navigating the different university environments. Thus, Bernstein's pedagogical conceptualisation demonstrates sensitivity for the inclusion of experiences of disadvantaged students. The pedagogic domain, moreover, comprises specialised modes of communication and interaction between knowledge communities and comprises the curriculum, teaching and assessment that together produce and reproduce academic practice (Cross, 2018). Significantly, both the official and pedagogic domains shape the conditions of becoming a participant in academic practice or epistemic practice.

However, several obstacles within the pedagogic domain can constrain rather than promote the conditions for students becoming participants

in the academic practice. The language used for teaching and learning, which is mainly English, methods of assessment based on competition and the method of delivery that "has remained a large group lecture-method" (Maringe, 2017, p.12), all compound to limit disadvantaged students learning to become participants in the academic practice. Large group lectures can reduce social presence (Hostetter & Busch, 2006), and teacher immediacy (Cross, 2018), thus undermining the notion of 'transactional distance' (Jansen, 1998). It could be argued that increasing distance between the lecturer and the student, as well as "the physical and/or psychological distance between people" (Love, 2003, p.3), has negative implications on epistemic access, which in the era of Covid-19, has seen the challenge of 'social presence' becoming magnified (Cross & Govender, 2021). Potentially, a theory of 'social presence' connected to the humanism embedded in the African philosophy of Ubuntu, could contribute to a deeper understanding of the nuances of technological mediation under and beyond the severity of Covid-19 in several domains of teaching and learning, emotional, political, pedagogical, linguistic and physical. 'Social presence', therefore, constitutes an important epistemological and methodological platform for teaching the marginalised other (Cross & Govender, 2021). On the language question, although proposals have been made to use some African languages for teaching and learning and some institutions have started making efforts towards that (Metz, 2017), English has remained the medium of instruction in most universities. According to some scholars (e.g. Maringe, 2017), this constrains epistemic access and success because the language for teaching and learning is not the first language for most disadvantaged students. As evidenced in the case studies, language policy at universities poses a complex pedagogic challenge impacting student epistemic access and success.

### Institutional mediation/responsibility

Academic practices are "underpinned by the academic discourses within faculties as well as individual faculty members or academic staff" (Cross 2018, p.82). This could be explained in the light of cognitive and scientific concepts, abstract and scientific ways of thinking, requiring mediation by academics at institutional level so that students are able to participate in the practice. As a cultural gap could exist between discourse practices at formal institutions and the students' cultural backgrounds, it could have negative implications on epistemic access. The role of institutional mediation, therefore, cannot be downplayed if students are to be enabled to learn to become successful participants in the practice at the institution. Support structures such as tutorship programmes can aid the mediation role of the institution to enhance epistemic access and "support strategies can vary from one faculty to another as well as within academic development units" (Cross 2018, p.4), as evidenced in the case studies. Epistemic access can thus vary across departments, faculties and institutions depending on the extent to which academics mediate knowledge transfer to students in the academic practice.

While institutional mediation and responsibility is important for epistemic access, there are challenges relating to racism and sexism, racial imbalance in staff appointments, poor service from support staff, inappropriate methods of teaching and assessing, perceived lack of relevance of the curriculum as well as students' social and academic experiences of alienation (Cross, 2018). In essence, the efficacy of institutional mediation and responsibility could negatively or positively influence epistemic access and success of students. Here again, this is borne out in the case study chapters.

### Academic development programmes

Specific interventions have been made in a bid to improve epistemic access in the South African higher education context. Academic development (AD) programmes are institution-led initiatives established to promote student's academic practices. AD programmes provide academic support and skills development to address under-preparedness and enable students to successfully cope with university curricula (Scott, 2009). Furthermore, they were introduced to enhance academic performance, especially of first-year students from disadvantaged schooling contexts (Scott, 2009), partly to address the so-called 'articulation gap'. The articulation gap has been described as occurring at two levels: "Firstly, at the level of curriculum structure, whereby the schooling system seems to fail to prepare secondary school pupils for university studies. It appears there are different forms of knowledge structures, which create an articulation gap. Secondly, . . . that modes of delivery or pedagogy used in the schooling system appear to be totally different to those of universities, a difference that widens the articulation gap" (CHE, 2022, p.198). The articulation gap emerged has a major challenge across the case studies and is explored further in this report.

Writing centres, which help students with the development of writing skills, are examples of AD programmes. AD programmes used to support students

from disadvantaged backgrounds are not without controversy. One perspective associated with the deficit model suggested that 'deficit' could be attributed to other reasons, for example, staff not being able to teach students in isiXhosa or in Afrikaans at an institution (Jansen, 1998). From this perspective, AD programmes for disadvantaged students were viewed as self-defeating because they start from the premise that the limitation is with the student rather than with the institution. One fault line relating to AD programmes is the lack of monitoring and evaluation to assess programme effectiveness (see, for example, Johannes *et al*, 2019), an issue that is flagged in this report. In general, the case studies in this report underline the critical role of AD programmes in enhancing epistemic access and success of historically marginalised students.

### Extended curricula programmes

When access to higher education expanded in the 1980s, extended curricula programmes emerged as another intervention to enable epistemic access in South African higher education (CHE, 2013). Extended curricula programmes refer to the provision of "additional curriculum time for foundational learning to enable students to develop sound academic and social foundations for succeeding in higher education" (CHE 2013, p.18). The programmes recognise that so-called under-prepared students require additional time in which to complete a particular programme. The assumptions of extended curricula programmes are congruent with Morrow's (1994) assumption that students must learn to become participants of existing academic practice.

Boughey (2005, p.232) asserts that extended or foundation programmes suggested a mismatch between the expectations of the institution and that of the student or an institutional mismatch with a student's prior education experience. Epistemological access is possible only if this mismatch is addressed. Rather than looking at students being unable to gain epistemic access under the established official and pedagogic domain, the institutional domains should be looked at critically as Motala and Menon (2020) argued that ontological reframing based on students' real-life backgrounds and experiences was essential to creating higher education institution spaces that were conducive to supporting effective teaching and learning.

The assumption made by the CHE (2013) is that most students require additional time which means that all qualifications should be extended by one year. "From the outset, extended curricula programmes have aimed to link access with success by bridging the secondary-tertiary articulation gap" (CHE, 2013, p.71). From this assertion, it could be argued that the CHE is aware of the articulation gap between schooling and higher education, yet the extended curricula programmes have primarily targeted students who do not meet an institution's regular admission criteria (CHE, 2013). This supports the issue of epistemic access focusing only on disadvantaged students while literature reveals that all students in South African higher education have limited epistemic access and success (Essop, 2020). By implication, the issue of transition from schooling to higher education and the articulation gap needs re-visiting.

### The social domain

The social domain entails social interactions, intersubjective relations, attitudes and behaviour with and among students and it represents the social space in which university life occurs (Cross, 2018, p.32). It is understood as the campus climate and is the formal and informal environment within a university in which we learn, teach, work and live (Cross, 2018). University stakeholders, such as staff and students, make up a crucial element of the social milieu of the campus climate, which could change or shift depending on the manner of engagement of those who constitute it (Cross, 2018). Changes could thus influence how students become members within the academic practice at different times.

Campus environments can inhibit student retention and adjustment, which happens when there is "alienation, hostility, social isolation, and invisibility … and it impacts on student academic practice" (Cross, 2018, p.180). Students who experience alienation are viewed as culturally displaced because they do not feel a sense of belonging (Cross, 2018). Some students feel the need to change their language, values, attitudes and behaviour in order to be assimilated (Cross & Johnson, 2008). It could be argued, therefore, that institutional culture in terms of the social domain could be mediated by students from diverse backgrounds (rich or poor, for example), which can impact on the mode and content of practice (Cross, 2018). Of interest is how students who become affiliated by changing their language, values, attitudes and behaviours, resulting in cultural displacement, succeed in becoming members in the academic practice.

While some campus climates are alienating, others promote belonging and a student feels part of the membership (Cross, 2018). Membership is defined as the "mastery of the common institutional language" (Coulon cited by Cross 2018, p.60). Those who have gained membership, set boundaries from the outside world (Cross, 2018). Furthermore, it implies that those who are members conform and abide by the norms and values that define them. It could be argued that epistemic access and success depend on a campus climate that is conducive, and not alienating, with students being able to gain membership into the common institutional language. Thus, Cross (2018) considers that academic achievement and success is dependent on campus membership that entails a sense of belonging and acceptance to a community of practice. Epistemic access is thus enabled where both the campus climate and student membership connect.

The social domain for students is not strictly confined to the formal learning experience. For example, when students attend a university outside of their hometown, their induction might stretch beyond the campus environment to residences (Cross, 2018). It is most probable that students living in campus residences and those residing off-campus could experience student life differently. According to Cross (2018), the social domain has been neglected and ignored in the scholarship on higher education, especially its impact on student epistemic access and success. The importance of the social life experiences of students were particularly highlighted during the lockdown period of the Covid-19 pandemic, with implications for student epistemic access and success (Woldegiorgis, 2022).

### Changing institutional culture

Cross and Johnson (2008) listed several changes that some of the formerly advantaged universities, embarked on to face the challenges of adapting their environment. They included, among others, teaching and learning practices, and mediation strategies directed at students who do not come from a middle-class background (Cross, 2008), a move to embrace all diverse students, as informed by a culture that purports to embrace diversity (Badat, 2010). In terms of pedagogy, there are initiatives to include teaching indigenous languages and the introduction of African histories (Maringe, 2017). Strategic policies have been developed to change some institutional cultures to include historically disadvantaged students (Cross *et al*., 2010). Among other things, this has manifested in the Africanisation of institutional artefacts such as songs sung on graduation days, dance, emblems and building names.

Some scholars stress the need for ontological reframing to reimagine the epistemic spaces at higher education institutions (Motala & Menon, 2020). While the purpose of changing institutional culture is to legitimise the inclusion of those who were historically excluded, the move has been found to be self-defeating in some instances, making no difference to what is found in Western academic institutions. For example, Metz (2017) argued that some Africanised university symbols, artefacts, dress codes or music played during graduation, were no different from what he saw in universities in America. It would be important to understand how institutional culture changes in different universities to influence historically disadvantaged students in terms of epistemic access.

In summary, institutional culture, comprising the official, pedagogic and social domains, provides a broad theoretical lens for understanding institutional mediation of student epistemic access and success. Institutional responsibility and interventions in the form of providing academic development and support to historically disadvantaged or marginalised students have emerged as central to institutional efforts to advance student epistemic access and success. These efforts notwithstanding, there is a case for more fine-grained research on the effectiveness of institutional interventions in addressing both student and institutional under-preparedness in addressing the school to university transition as a fundamental systemic challenge.

### Decolonisation/decolonial approaches

Decolonial thinking and insights have particular value in recognising the ontological and epistemological realities of the historically oppressed and marginalised people of the world. This includes the historically marginalised students in countries such as South Africa, as the obvious products of persistent coloniality. It was Brink (2021, p.404), who captured the theoretical nuance of decolonial insights, when he declared: "Coloniality is the issue, decolonisation is the aim".

Decolonisation and decolonial approaches in recent years have drawn attention to issues of cognitive, epistemic, and social justice

(Cross & Govender, 2021; Ndlovu-Gatsheni, 2018). This has had significant implications for higher education policy and practice. In South Africa, the student movements of 2015 to 2017, referred to as #RhodesMustFall, and #FeesMustFall respectively, further highlighted the relevance of decolonisation, decolonial approaches and decolonial theories on students' academic experiences. In particular, decolonial approaches have highlighted the importance of relevant knowledge, or engaging with knowledge linked to the everyday experiences of students, including attention to whose knowledge, and to what end, as a fundamental element of epistemic access.

In South African universities, a Eurocentric curriculum has dominated and defined worthwhile knowledge (Jansen, 1998). As such, the project of decolonisation aims largely to unveil and unmask the invisible structure of coloniality, and its implications for epistemology and knowledge production in higher education (Ndlovu-Gatsheni, 2016), to have equitable access by all in terms of the university system, epistemology, the curriculum and pedagogy (Heleta, 2016; Maserumule, 2015). Thus, decolonisation and decolonial approaches have always sought to, and continue to seek to, promote pluriversality, multiplicity and social justice (Ndlovu- Gatsheni, 2012), to bring into conversation all knowledge systems including indigenous knowledges and African perspectives that have previously been at the periphery (Ndlovu- Gatsheni, 2016). While the curriculum decolonisation project remains very much a work-in-progress in terms of a clearly enunciated pedagogy and disciplinary content integration, it has the potential to address long-standing issues of social inequality, cognitive and social justice, thereby enhancing epistemic access and success of historically disadvantaged students.

There is a danger, however, for decolonisation approaches to be reduced to activism, resulting in irrational and emotionally charged reactions that constrain students' learning to become participants in the academic practice. Furthermore, it could be over-sentimentalised and applied to scholarly work without adequate intellectual rigour with negative implications for epistemic access and success. As Cross and Govender (2021, p.18) suggest, what is required, perhaps "are not necessarily alternatives but, instead, alternative thinking about the epistemological, theoretical, and methodological foundations of knowledge in African higher education". From the perspective of enhancing epistemic access and success of historically marginalised students, the decolonisation project, at the very least, can contribute to broadening the minds of students who continue to grapple with the twin challenges of, firstly, being mired in coloniality, and secondly, having to make sense of the potential benefits and relevance of decolonisation for their own intellectual journeys.

### Conclusion

While this literature review is not conclusive, it has foregrounded the interplay between student agency and institutional mediation in their epistemic experiences in higher education. The Bernsteinian theoretical frame is viewed as useful in underpinning the official, pedagogic and social domains. Specifically, the Bernsteinian notion of 're-contextualisation' which stresses prior experiences and the background knowledges of students from disadvantaged social contexts. Re-contextualisation of prior experiences could assist students in utilising their prior knowledge in negotiating the academic and social spaces for their active participation in the academic practice, enhancing the possibility for epistemic access. Simultaneously, institutions need to develop programmes that assist in translating decolonial ideas and insights so that they have concrete and practical value for the lived academic practice of historically marginalised students. There are other important issues such as the 4IR, 21$^{st}$ century skills and Covid-19, which have emerged, which have also impacted higher education and influences epistemic access and success differently, constraining and enabling it in specific and different ways. Although the data from this study did not delve into these issues in any detail, future studies will need to explore them more carefully.

Fundamentally, though, student agency and the institutional cultural domain need to be in sync, to enable students to learn to negotiate campus membership and acquire epistemic access and success.

# Chapter 3

## Statistical Overview of Access and Success in South African Higher Education

### Introduction

The chapter provides a statistical overview of access, measured by headcount enrolment, and success, measured by throughput, for the national higher education system, followed by analysis for the six case study universities. It should be noted that the data described in this chapter is for a different cohort of students from those that were interviewed as explained in Chapter 1. Nevertheless, the analysis, of the data has relevance. Datasets that describe headcount enrolment and throughput at the national level of South Africa and institutional level of participating institutions homing in humanities/arts and natural science faculties, are presented. An analysis of headcount is presented first, followed by throughput. For both data are disaggregated by population group or race[4] as well as gender. At the institutional level throughput data are disaggregated by NSFAS recipients[5] of the cohort of undergraduate students who registered at the case study or participating institutions for the first time in 2014. The cohort analysis extends to 2019. Analysis is also carried out focusing particularly on Natural Sciences, and Humanities/Arts faculties (hereafter referred to as Natural Sciences or Humanities faculties respectively). This chapter analyses faculty enrolment[6] and throughput data.

The chapter defines terminology pertaining to statistical representations of access and success at universities. The statistical analysis begins with an overview of headcount enrolment at national, institutional and then faculty levels followed by the same for throughput. Headcount enrolment and throughput data are disaggregated by race and gender. At the institutional level, throughput was also disaggregated by NSFAS recipients.

Key findings drawn from the statistical analyses are:

- At the level of institutions, throughput ranges from 43% (CUT's three-year diploma qualifications) to 79% (UL's four-year B-degrees) for completion in minimum time plus 2 years.
- Throughput in faculties of natural science range from 37% (CUT and UP) to 84% (UL). Throughput in faculties of humanities range from 47% (UWC) to 85% (UL).
- On average, for all qualification types, throughput is best in the four-year B-degrees.

The statistical overview moreover points out two critical insights; one with respect to race and another for gender. While national level headcount enrolment data show that African student enrolment is proportional to South Africa's demographic distribution, the institutional level headcount enrolment illustrates race trends that suggest South African higher education is not a racially integrated or integrating landscape. One institution enrols mainly African students while at two others, the proportion of headcount enrolment for White students decreased from 2014 to 2019. Regarding gender, at the national level the proportion of female headcount enrolment

4 In Chapter 3, race is used for consistency across the report, even though HEMIS uses the term 'population group'.
5 The data were gathered from institutions with the assistance of the CHE. Institutions provided a list of programmes offered in each faculty, and data associated with those programmes were then drawn from the Higher Education Management Information System (HEMIS) to compile the statistics of each institution.
6 The data were gathered from institutions with the assistance of the CHE. Institutions provided a list of programmes offered in each faculty, and data associated with those programmes were then drawn from the Higher Education Management Information System (HEMIS) to compile the statistics of each institution.

of undergraduate students has been steadily increasing over the last decade. Yet, the trend between faculties at all institutions is that the distribution in humanities faculties is skewed toward females while in science faculties the gender distribution is relatively equal. The conclusion summarises the chapter, pointing out how statistical analyses could be strengthened to contribute to enhancing our grasp of epistemic access and success.

### Terminology pertaining to student access and success

Enrolment and throughput rates are analysed using large scale data gathered by institutions on behalf of the Department of Higher Education and Training (DHET) from the Higher Education Management Information System (HEMIS). Statistical reporting relating to enrolment, progression and pass rates in higher education analyses key variables that represent student access and success, headcount enrolment and throughput rates of cohorts. A cohort is '[t]he first-time entry students in a given year who have enrolled for a particular higher education programme' (CHE 2021, p.ii). Headcount is '[t]he total number of students enrolled at each institution whether full-time, part-time or occasional students' (CHE 2021, p.iii). Headcount can thus also be referred to as enrolment. The two are used interchangeably in this chapter. Throughput rates are calculated based on 'the number of first-time entry undergraduate students of a specific cohort of a specific year who have graduated either within minimum time [M], or up to two years beyond the minimum time [M+1 and M+2], to the number of students in the baseline enrolments of that cohort' (CHE 2021, p.v). The relationship between throughput and student academic success is discussed in the introduction.

### Undergraduate headcount enrolment

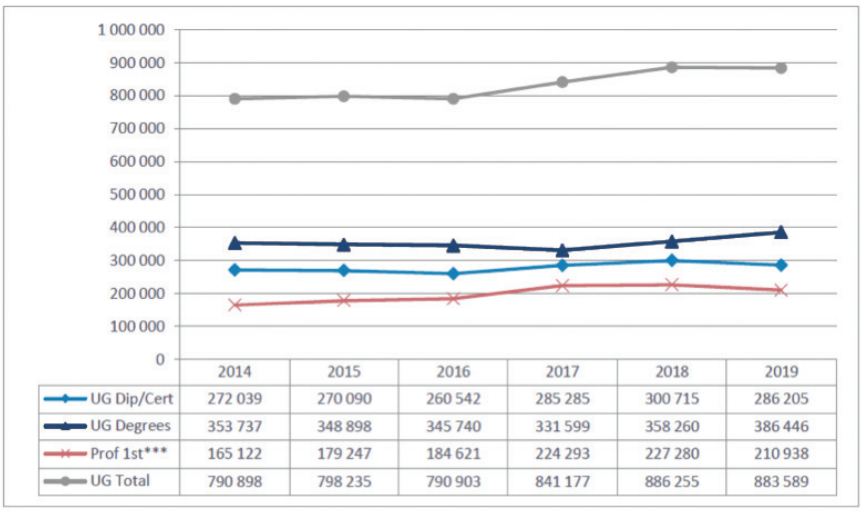
### National, institutional and faculty headcount of the South African higher education system

This section presents statistical data on enrolment at the national, institution and faculty levels. At the national level, data are compiled from all South African public higher education institutions. Headcount enrolment for the cohort of undergraduate students who registered for the first time in 2014 are presented, disaggregated by race as well as gender. Throughput of the same cohort, disaggregated by race as well as gender, is presented in the following section.

### Undergraduate headcount enrolment disaggregated by race

### National level

Figure1, illustrates that in 2019, undergraduate headcount enrolment at South African universities was **883 589** (CHE, 2021, p.17). This includes 286 205 students enrolled for undergraduate diplomas or certificates[7], 386 446 enrolled for undergraduate 3-year degrees, and 210 938 enrolled for undergraduate professional or 4-year degrees.[8]



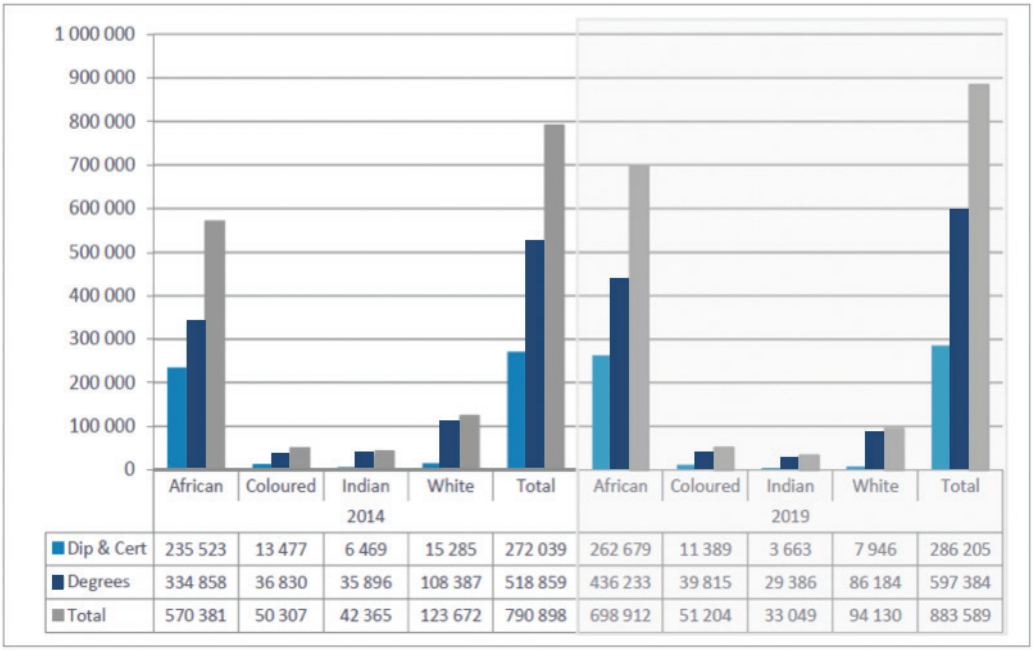

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|
| UG Dip/Cert | 272 039 | 270 090 | 260 542 | 285 285 | 300 715 | 286 205 |
| UG Degrees | 353 737 | 348 898 | 345 740 | 331 599 | 358 260 | 386 446 |
| Prof 1st*** | 165 122 | 179 247 | 184 621 | 224 293 | 227 280 | 210 938 |
| UG Total | 790 898 | 798 235 | 790 903 | 841 177 | 886 255 | 883 589 |

*Figure 1: National headcount undergraduate enrolment by qualification type, 2014-2019*

7 Three types of qualifications offered at the undergraduate level in South African higher education institutions. These are: diploma or certificate qualifications; degree qualifications; and professional first four-year qualifications, or four-year B-degrees.

8 In this chapter degree qualifications are referred to as three-year B-degrees and professional first qualifications as four-year B-degrees.

Disadvantage in South Africa is associated with race due to the history of colonialism and apartheid. Disadvantage and marginality are however not restricted to race but are best understood via intersecting categories of which race can be one node in South Africa. Race continues to be reported by the CHE, DHET and institutions as a sole category of analysis to indicate transformation in the sector.




| | 2014 | | | | | 2019 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | African | Coloured | Indian | White | Total | African | Coloured | Indian | White | Total |
| Dip & Cert | 235 523 | 13 477 | 6 469 | 15 285 | 272 039 | 262 679 | 11 389 | 3 663 | 7 946 | 286 205 |
| Degrees | 334 858 | 36 830 | 35 896 | 108 387 | 518 859 | 436 233 | 39 815 | 29 386 | 86 184 | 597 384 |
| Total | 570 381 | 50 307 | 42 365 | 123 672 | 790 898 | 698 912 | 51 204 | 33 049 | 94 130 | 883 589 |

*Figure 2: National headcount undergraduate enrolment by race, 2014-2019*

When considering enrolment by race, African students constituted the majority of undergraduate enrolments in both 2014 and 2019 for all undergraduate qualifications (CHE 2021, p.18). Notably, headcount enrolment for all races, with the exception of African students, declined for diploma or certificate programmes between 2014 and 2019. In 2019, 92% of students enrolled for diplomas and certificates were African and 3% were White, while 73% of students enrolled for degrees were African, and 14% were White. (CHE 2021, p.18).

Since 2000, the proportion of headcount enrolment of female to male undergraduate students has been increasing in South Africa. In 2005, 54.6% of the enrolment were women and 45.4% were men (Essop 2020, p.60). This was slightly lower in 2000, when 53% of the first time entering undergraduate students were women and 47% were men. In 2019, 60% (529 068) undergraduate students were female and 40% (354 488) were male (CHE, 2021, p.19).

### Institutional level

Considering the case study institutions, headcount enrolment comprised 159 433 undergraduate students, or approximately 18% of the undergraduate student population in South Africa in 2019 (883 589). The table below shows that UJ (41 235) had the highest headcount enrolment in 2019 of participating institutions, and UL (18 456) the lowest. UJ and UL experienced decreases in undergraduate enrolment while all other participating institutions experienced increases. Amongst the participating institutions, CUT experienced the greatest increase in enrolment between 2014 and 2019.

The table shows the proportion of students enrolled at each institution by race, and how this has shifted from 2014 to 2019. The proportion of African students has increased at every institution except for UL, which is regarded as an indicator of increased equity in the population profile of students. The University of Limpopo had an overall decrease in enrolments for all races, which is presumably a result of the move of the former Medical University of South Africa (MEDUNSA) campus into the newly established Sefako Makgatho Health Science University (SMU) during this period (DHET 2020, p.15).

There was a decline in Coloured enrolments in CUT, UJ and UL, but considerable increases in Coloured enrolments at UP (38%), UWC (14%) and Wits (25%). The proportion of Indian student enrolments declined at CUT and UWC, with a real decrease in numbers at CUT, UJ and UL. At UWC the number of Coloured enrolments increased from 7 857 to 8 924 which represents a 14% increase, but African students at UWC increased by 27% from 6 775 to 8 617, which led to a decrease in the proportion of Coloured students. Indian enrolments decreased at four universities over the period 2014 to 2019 but increased at UP by 30% and at Wits by 12%.

White enrolments decreased at all universities over the period 2014 to 2019, both in terms of actual numbers as well as a percentage of total enrolments. This could be attributed to a decrease in white population numbers because of emigration or white youth that are working overseas or because of a shift to private higher education institutions. White students made up 17% of enrolments in private higher education institutions in South Africa in 2019 (DHET 2021, p.28). In public HEIs, 10% were white students on 2019 (from Figure 2) The difference between 10% and 17% does not appear large, however the proportion of white students in private HEIs is greater than at public HEIs.

*Table 1 -Undergraduate enrolments by race at undergraduate level in participating institutions, 2014 and 2019*

| Institution | Year | African | African Proportion | Coloured | Coloured proportion | Indian | Indian proportion | White | White proportion | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| CUT | 2014 | 11 879 | 89% | 469 | 4% | 39 | 0% | 970 | 7% | 13 357 |
| | 2019 | 18 920 | 95% | 391 | 2% | 28 | 0% | 564 | 3% | 19 903 |
| UJ | 2014 | 35 926 | 84% | 1 277 | 3% | 1 768 | 4% | 3 669 | 9% | 42 640 |
| | 2019 | 36 803 | 89% | 1 154 | 3% | 1 403 | 3% | 1 875 | 5% | 41 235 |
| UL | 2014 | 20 017 | 98% | 16 | 0% | 120 | 1% | 181 | 1% | 20 334 |
| | 2019 | 18 432 | 100% | 14 | 0% | 5 | 0% | 5 | 0% | 18 456 |
| UP | 2014 | 14 632 | 42% | 780 | 2% | 1 782 | 5% | 17 553 | 51% | 34 747 |
| | 2019 | 17 315 | 48% | 1 080 | 3% | 2 314 | 7% | 15 037 | 42% | 35 746 |
| UWC | 2014 | 6 775 | 42% | 7 857 | 49% | 752 | 4% | 775 | 5% | 16 159 |
| | 2019 | 8 617 | 46% | 8 924 | 47% | 604 | 3% | 710 | 4% | 18 855 |
| WITS | 2014 | 13 440 | 62% | 881 | 4% | 2 972 | 14% | 4 368 | 20% | 21 661 |
| | 2019 | 16 954 | 67% | 1 099 | 5% | 3 315 | 13% | 3 870 | 15% | 25 238 |
| Total | 2014 | 102 669 | 69% | 11 280 | 8% | 7 433 | 5% | 27 516 | 18% | 148 898 |
| | 2019 | 117 041 | 73% | 12 662 | 8% | 7 669 | 5% | 22 061 | 14% | 159 433 |

Essop (2020, p.79) argues that transformation of the demographic profile in higher education has made significant progress. While black students made up 53% of higher education enrolments in 1993, by 2017 black enrolments increased to 84.5% (Essop 2020, p.79). This implies that at the national level, higher education had transformed in terms of proportional racial enrolment. The literature reviewed in Chapter 2 has shown that since the early 1990s, Wits has transformed in terms of its demographic profile. Here the changes with respect to institutions that participated in the study are explored.

Among the participating institutions, CUT, UJ and UL had the highest proportional enrolment of black students. Of the three, UL had the highest proportion of black students in 2019, rounded off to 100% of students. While UL was not situated in a former homeland, it was very close to the former homelands of Lebowa, Venda and Gazankulu and was established as the University of the North under the Extension of University Education Act no 45 of 1959 that provided 'for the establishment, maintenance and control of university colleges for non-white persons'.

UP and Wits had the highest proportional enrolment of white students among the participating institutions, with UP having had the highest (42% in 2019). UP is a historically white and Afrikaans institution while Wits is a historically white and English institution. At both UP and Wits the proportion of white students decreased from 2014 to 2019, as did white enrolment in absolute numbers.

Among the participating institutions, UWC had the highest percentage of Coloured students in both 2014 and 2019. UWC, situated on the Cape Flats in Belhar, was established as an institution designated for the Coloured race in 1959, also in line with the provisions of the Extension of University Education Act.

This section of the chapter presents data that relate to the faculties of humanities and natural sciences at participating institutions. As noted, Higher Education Management and Information System (HEMIS) does not gather data relating to faculty but does gather data relating to programmes for which students are enrolled. The nature and scope of programmes offered in faculties differed from institution to institution with a marked difference at CUT in this regard. As such, although the data are presented alongside each other, they are not exactly comparable in every respect.

### Faculty level

Table 1 presents the humanities and natural sciences undergraduate headcount enrolment together with the total undergraduate enrolment at participating institutions. In 2014 CUT, and in 2019 UL, had the least undergraduate students enrolled across participating institutions. UJ had the most undergraduate students enrolled in both years.

Table 2 shows that, in 2019, Wits had the most and UWC had the least humanities undergraduate enrolments across participating institutions. This did not differ markedly from 2014. The table illustrates that, in 2014 and 2019, UL had the most and CUT had the least natural science undergraduate student enrolments across participating institutions.

Figure 2 showed that 79% of students enrolled for undergraduate programmes in 2019 were African, and almost 11% were white (CHE 2021, p.18). Specifically, with respect to qualification type, 73% of students enrolled for degrees were African, and 14% white, while for diplomas 92% were African and 3% white. The last census found that the African race constituted 79.2% of the entire South African population, and the white race constituted 8.9% (StatsSA 2012, p.21). Thus, with respect to degree enrolment there were fewer African and more white students enrolled than in proportion to their respective races, while for diplomas and certificates, the opposite was the case. Further to this, it should be noted that, of the participating institutions, only CUT and UJ offered three-year diplomas. The racial composition of the six participating institutions was also discussed above (Table 1), while the faculties of humanities and natural sciences' demographic distribution is shown in Table 3 and discussed below.

*Table 2: Undergraduate (UG) headcount enrolment in the humanities and natural science faculties at participating institutions*

| Institution | Field of study | 2014 | 2019 | Field of study | 2014 | 2019 |
|---|---|---|---|---|---|---|
| CUT | Humanities | 2 926 | 5 162 | Natural Sciences | 1 459 | 1 864 |
| | **Total UG Headcount** | 13 357 | 19 903 | **Total UG Headcount** | 13 357 | 19 903 |
| UJ | Humanities | 5 206 | 4 838 | Natural Sciences | 3 148 | 3 726 |
| | **Total UG Headcount** | 42 640 | 41 235 | **Total UG Headcount** | **42 640** | **41 235** |
| UL | Humanities | 5 344 | 6 413 | Natural Sciences | 6 158 | 5 241 |
| | **Total UG Headcount** | 20334 | 18456 | **Total UG Headcount** | **20 334** | **18 456** |
| UP | Humanities | 4 370 | 4 180 | Natural Sciences | 4 825 | 4 610 |
| | **Total UG Headcount** | 34 747 | 35 746 | **Total UG Headcount** | **34 747** | **35 746** |
| UWC | Humanities | 3 276 | 3 889 | Natural Sciences | 1 656 | 2 389 |
| | **Total UG Headcount** | **16 159** | **18 855** | **Total UG Headcount** | **16 159** | **18 855** |
| WITS | Humanities | 6 031 | 7 224 | Natural Sciences | 2 823 | 3 611 |
| | **Total UG Headcount** | **21 661** | **25 238** | **Total UG Headcount** | **21 661** | **25 238** |

*Table 3: Faculty enrolments by race*

| | Institution | CUT | | UJ | | UL | | UP | | UWC | | WITS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Faculty | Race | 2014 (%) | 2019 (%) | 2014 (%) | 2019 (%) | 2014 (%) | 2019 (%) | 2014 (%) | 2019 (%) | 2014 (%) | 2019 (%) | 2014 (%) | 2019 (%) |
| **Humanities** | **A** | 94% | 97% | 87% | 93% | 100% | 100% | 33% | 45% | 41% | 41% | 61% | 67% |
| | **C** | 3% | 2% | 4% | 3% | 0% | 0% | 3% | 4% | 55% | 56% | 7% | 6% |
| | **I** | 0% | 0% | 3% | 1% | | | 4% | 5% | 2% | 2% | 10% | 10% |
| | **W** | 3% | 1% | 6% | 3% | | | 60% | 46% | 2% | 2% | 23% | 17% |
| | | | | | | | | | | | | | |
| **Science** | **A** | 79% | 89% | 84% | 91% | 100% | 100% | 49% | 50% | 51% | 60% | 68% | 73% |
| | **C** | 4% | 2% | 2% | 2% | 0% | 0% | 2% | 2% | 36% | 31% | 3% | 3% |
| | **I** | 0% | 0% | 4% | 4% | 0% | 0% | 5% | 6% | 8% | 5% | 12% | 12% |
| | **W** | 17% | 9% | 10% | 4% | 0% | 0% | 45% | 42% | 5% | 4% | 18% | 13% |

In the Humanities faculties at CUT, UJ, UL and Wits, most undergraduate students enrolled in 2014 and 2019 were African, while at UP, the majority were white and at UWC they were Coloured. At most institutions the racial distribution of humanities undergraduate students remained relatively constant. The largest shift was at UP where the proportion of white students shifted from 60% in 2024 to 46% in 2019, just 1% more than African students. Should this trend continue, it is likely that African students will be in the majority in the humanities faculty at UP. UWC had the largest proportion of Coloured students across participating institutions' humanities faculties while Wits had the largest proportion of Indian students.

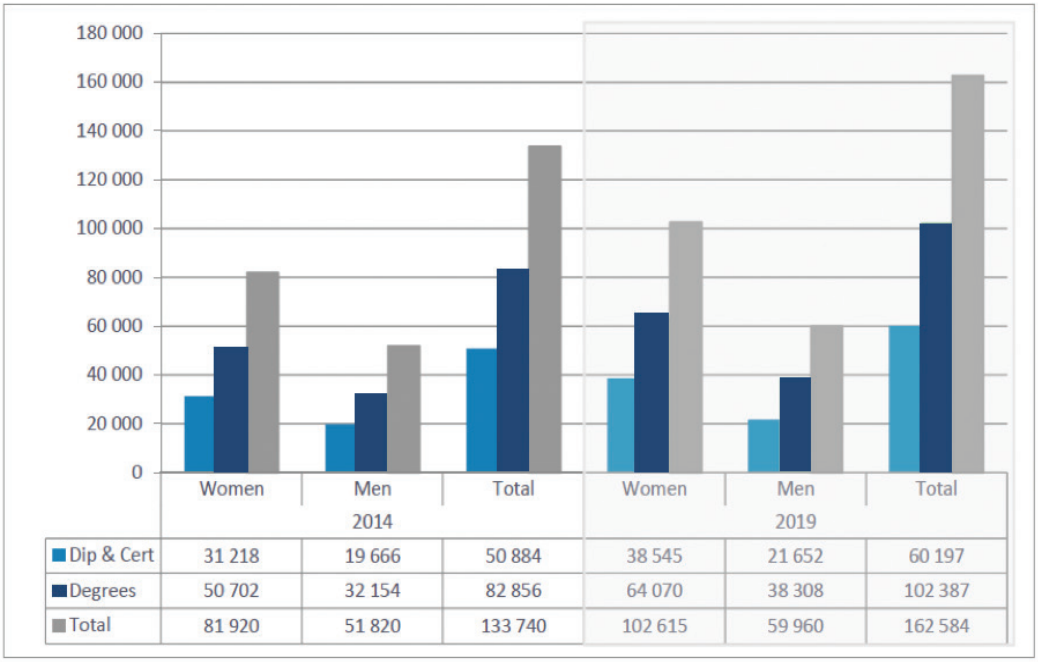
Except for UL and UWC that had 100% and 41% enrolment respectively, of African students in 2014 and 2019, the proportion of African students increased at the other participating institutions from 2014 to 2019. Similarly, the proportion of white students decreased from 2014 and 2019, except for UL that had none and UWC where the proportion of white students remained stagnant at 2%.

In the faculties of natural sciences across the participating institutions, most undergraduate students enrolled in 2014 and 2019 were African.

UP had the lowest proportion of African students (49% in 2014 and 50% in 2019) and the largest proportion of white students. UWC had the largest proportion of coloured students 36% and 31% respectively). Wits had the largest proportion of Indian students (12% in both years). Except for UL that had 100% African students enrolled in 2014 and 2019, the proportion of African students increased in other participating institutions' science faculties from 2014 to 2019 and the proportion of white students decreased.

### *Undergraduate headcount enrolment disaggregated by gender*

#### *Gender distribution in national enrolment*




| | Women | Men | Total | Women | Men | Total |
|---|---|---|---|---|---|---|
| | 2014 | | | 2019 | | |
| Dip & Cert | 31 218 | 19 666 | 50 884 | 38 545 | 21 652 | 60 197 |
| Degrees | 50 702 | 32 154 | 82 856 | 64 070 | 38 308 | 102 387 |
| Total | 81 920 | 51 820 | 133 740 | 102 615 | 59 960 | 162 584 |

*Figure 3: Headcount of undergraduate qualifications awarded by gender for 2014 and 2019. (CHE, 2021, p.19)*

Figure 3 shows that in 2019, 63% (102 615) of graduates from undergraduate programmes were women, while 37% (59 960) were men, compared to 61% (81 920) women and 39% (51 820) men in 2014. In 2010 61% (69 535) of undergraduates who graduated were women and 39% (44 129) were men (CHE 2017, p.19). If as the White Paper upholds, graduation provides skills for the economy and postgraduate students for the system (DHET 2020a, p.13), the gendered enrolment and graduation rates should be impacting on labour market supply as well as the postgraduate pipeline. Gendered patterns of epistemic access are not the focus of this study but should be taken up as a point of investigation in further studies. The gendered distribution of educational outputs across the education spectrum can be significant for social transformation. Furthermore, investigations at the intersection of race and gender would be valuable.

*Gender distribution at participating institutions*

*The gender distribution of enrolment at participating institutions is illustrated and described below.*

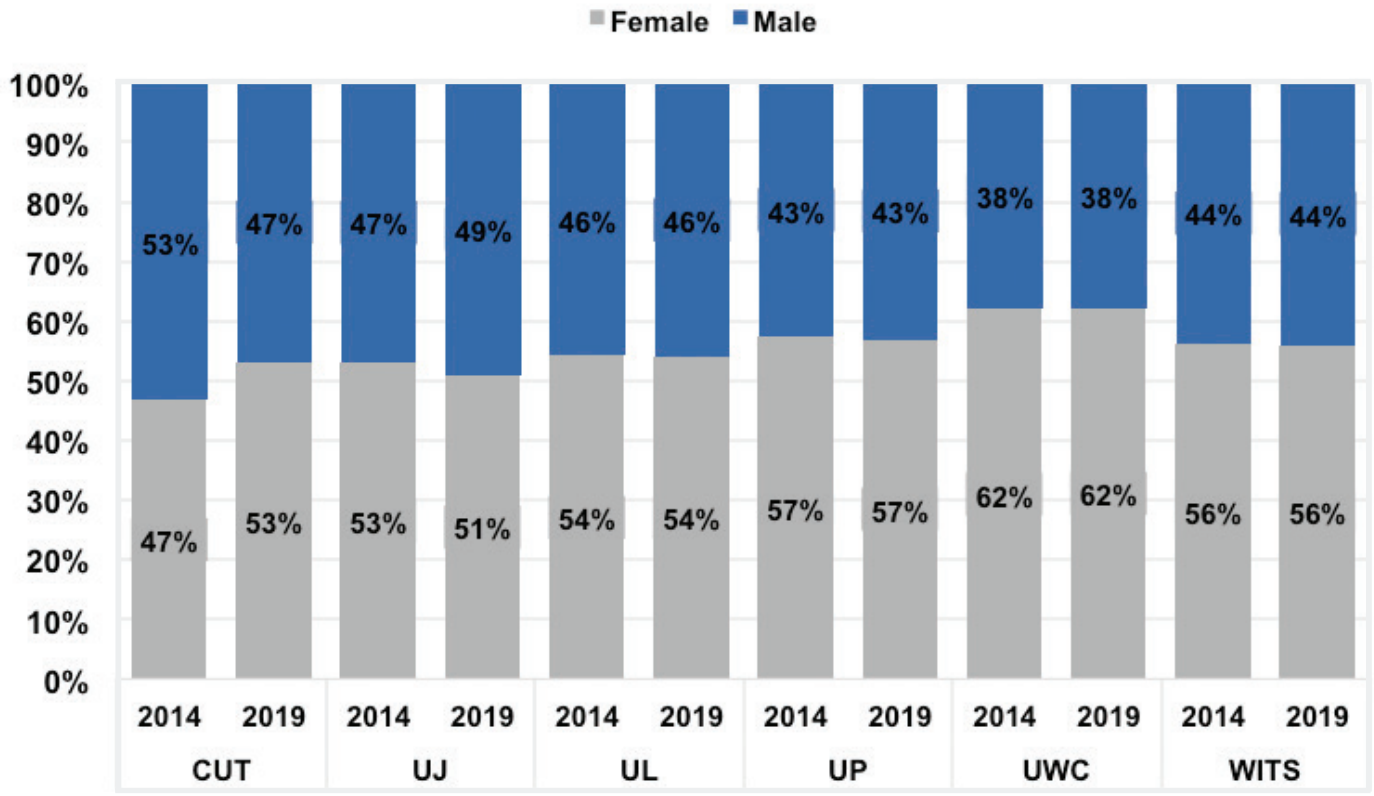



*Figure 4: Gender profile of undergraduate students across participating institutions*

Whereas female participation in university education is a concern in most African countries, it is not an equity concern in South Africa. On the contrary, the low participation rate and retention of males (especially African and coloured males) in the university system is regarded as a concern that needs to be addressed to improve equity. As the male and female population for the university age group are the same and a higher participation rate for male students in university education would have been expected.

The proportional distribution of gender for undergraduate enrolments in 2014 and 2019 is displayed in Figure 4. The only university that had a marked shift in gender distribution between 2014 and 2019 was CUT, where male enrolments were proportionally higher in 2014 (53%), but in 2019 female enrolments were proportionally higher (53%), matching the national trend. Of the participating institutions, UWC had the highest proportion of female enrolments in both 2014 and 2019 (62%). UJ had the most equal participation in 2019 with 51% females compared to 49% males.

Participation in higher education is, however, commensurate with school achievement. In this regard it is notable that female learners achieve better results throughout their school career, and male participation in higher education is lower. The phenomenon of gender distribution in HEIs is thus not something that can be addressed in the higher education system alone. A holistic approach is required for an adequate intervention. Female participation in higher education was not always higher than males in South Africa. Increasing female participation was part of the transformation agenda in the post-apartheid higher education landscape from 1994.

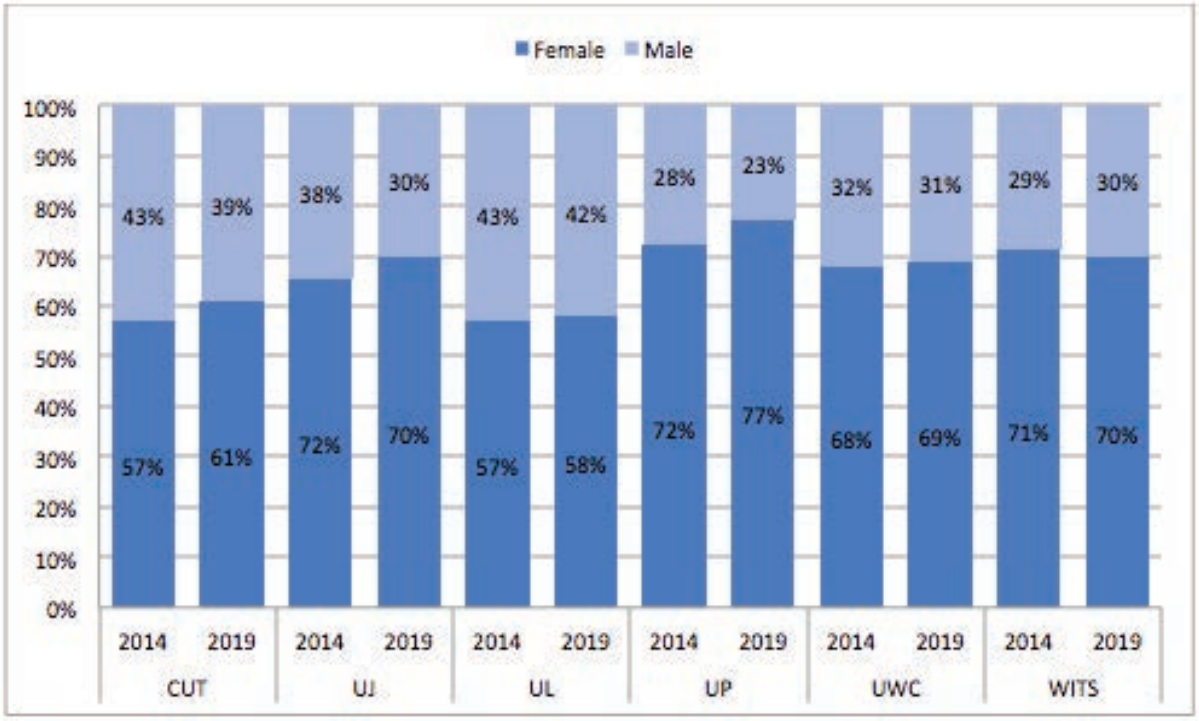



*Figure 5: Gender distribution in humanities faculties across participating institutions*

Figures 5 and 6 present the female and male distribution of undergraduate students in the humanities and science faculties at participating institutions for 2014 and 2019. As stated, in 2019 more female (60%) undergraduate students were registered in public higher education institutions in South Africa than males (40%), a trend that has been evident since 2000 at least. In addition, participating institutions registered more female than male undergraduate students in 2019 (see Figure 4). The table above shows that, while in many instances there were more female students enrolled than males, the difference in range between female and male undergraduate students across the humanities and natural science faculties illustrate diverse trends.

Across participating institutions, in humanities faculties, there were more female than male undergraduate students. The average difference was 67% female, 33% male. UP had the largest difference in 2019 between females (77%) and males (23%), while CUT and UL had the smallest difference between female (57%) and male (43%) undergraduate humanities students in 2014. Interestingly while at the institutional level, UJ had the most equal female/male undergraduate enrolment rate, the average difference between female and male undergraduate students in the humanities faculty was 42% between 2014 and 2019.

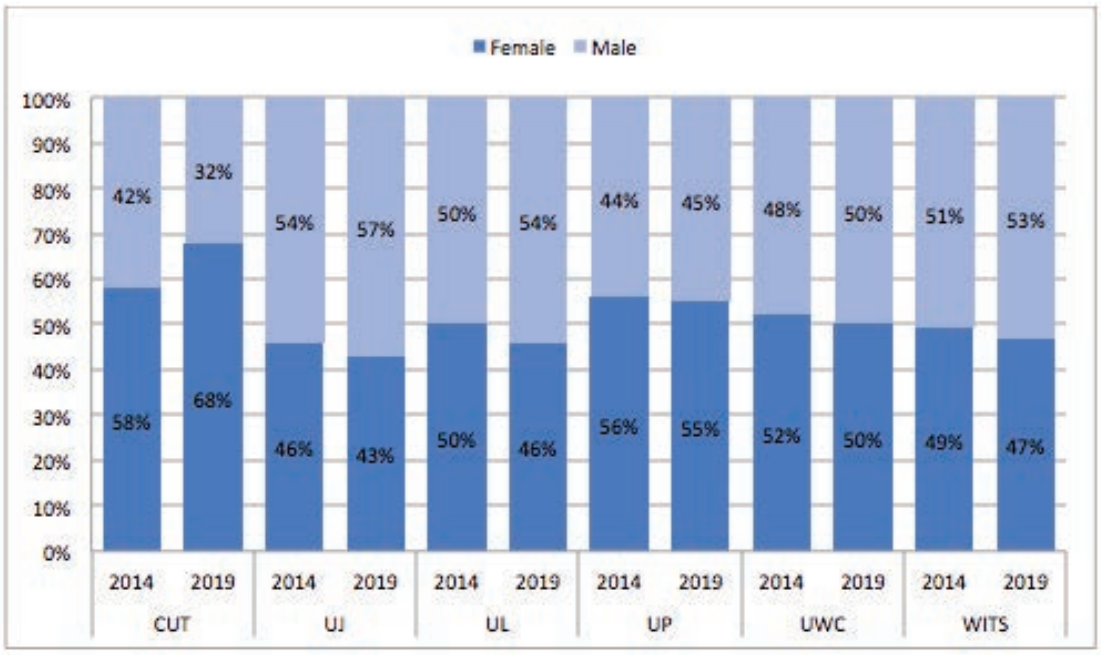



*Figure 6: Gender distribution in science faculties across participating institutions*

There was a more equal spread of female and male undergraduate students in science faculties at participating institutions. The average difference between female and male undergraduate students was 52% female and 48% male. Unlike the humanities where all institutions had more female than male undergraduate students, in the science faculties, UJ, UL (2014) and Wits had more male than female undergraduate students. The institution with the largest difference in enrolment numbers between females (68%) and males (32%) was CUT in 2019. UL had no gender difference in 2019. Interestingly, while UWC had the greatest difference in female/male overall undergraduate enrolment, the difference in the science faculty was 2.5% on average between 2014 and 2019.

*Throughput in higher education institutions by race*

## National

Throughput rates for the 2014 undergraduate cohort are presented by the three qualification types, starting with diplomas, followed by three-year B-degrees and then four-year B-degrees.

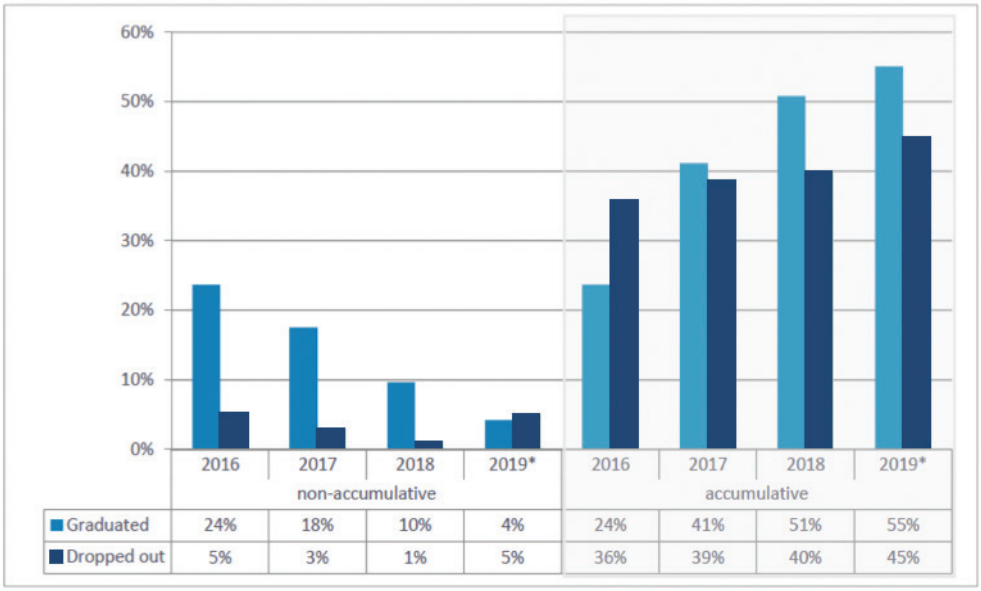
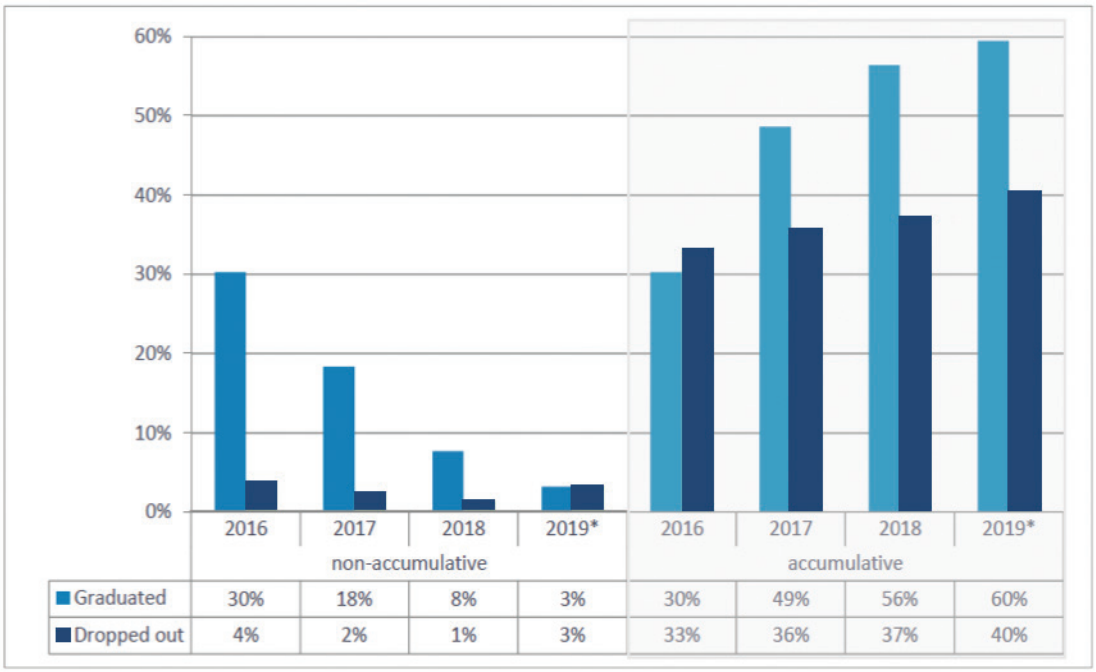



*Figure 7: Throughput rates for diploma qualifications for those entering for the first time in 2014 (excluding UNISA)*

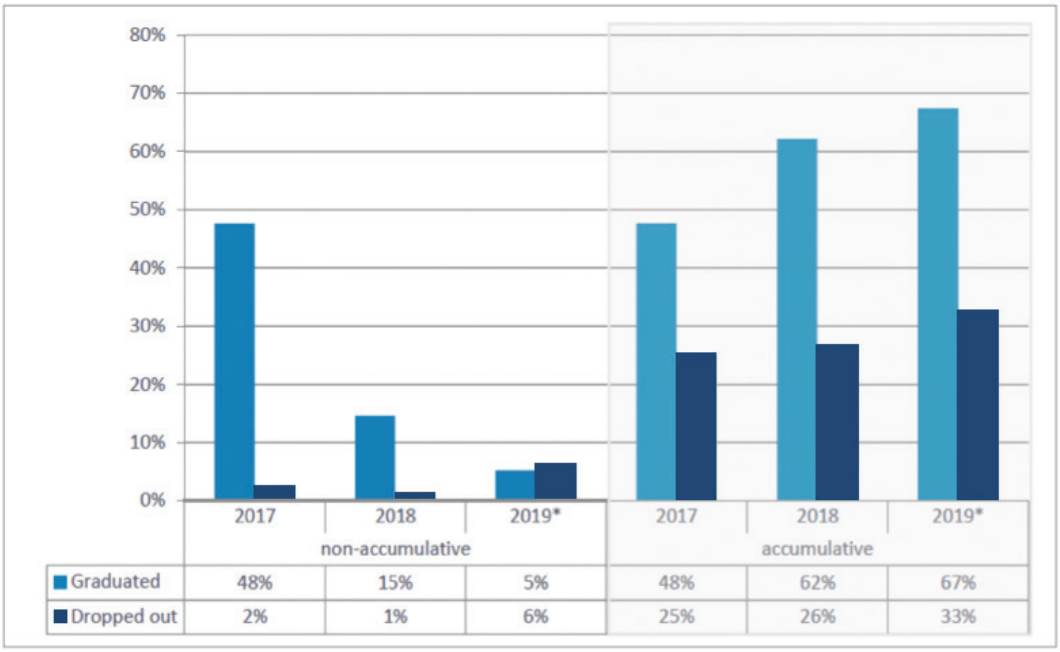
Figure 7 illustrates the national diploma throughput rates for the cohort who enrolled for the first time in South African public universities (except UNISA) in 2014 (CHE 2021, p.61). The figure shows that 55% graduated by 2019, whereas 45% dropped out or were yet to complete (CHE 2021, p.61). The figure shows that the largest proportion of graduates (24%) is after three years of study, i.e. in regulation time (CHE 2021, p.61), but the majority need more time and a significant proportion graduate after one additional year. Fewer than a quarter of those who enrolled for diplomas in 2014 completed in regulation time. Of the white cohort there are more graduates (35%) after three years than the African cohort (23%) (CHE 2021, p.62). After six years the difference is however less marked with 55% of the African cohort and 57% of the white cohort graduating (CHE 2021, p.62).

Figure 8 illustrates the 2014 cohort throughput rates for three-year B-degrees (CHE 2021, p.62) and shows that 60% of those who enrolled graduated by 2019, whereas 40% dropped out or were yet to complete (CHE 2021, p.62). Like diplomas, the largest proportion of graduates (30%) finish in regulation time (CHE 2021, p.62) and this accounts for half of those who complete. That proportion is however under a third of those who enrolled for three-year B-degrees in 2014.




| | non-accumulative | | | | accumulative | | | |
|---|---|---|---|---|---|---|---|---|
| Graduated | 30% | 18% | 8% | 3% | 30% | 49% | 56% | 60% |
| Dropped out | 4% | 2% | 1% | 3% | 33% | 36% | 37% | 40% |

*Figure 8: Throughput rates for three-year B-degrees for those who enrolled for the first time in 2014 (excluding UNISA)*




| | non-accumulative | | | accumulative | | |
|---|---|---|---|---|---|---|
| Graduated | 48% | 15% | 5% | 48% | 62% | 67% |
| Dropped out | 2% | 1% | 6% | 25% | 26% | 33% |

*Figure 9: Throughput rates for four-year B-degrees for those who enrolled for the first time in 2014 (excluding UNISA)*

Figure 9 illustrates the throughput rates for the 2014 cohort for four-year B-degrees (CHE 2021, p.64). The figure shows that 67% of those who enrolled graduated by 2019, whereas 33% dropped out or were yet to complete (CHE 2021, p.64). As with the other two qualification types, the largest proportion of graduates (48%) do so in regulation time, at the end of four years of study (CHE 2021, p.64). This means that just under a half of those who enrolled for a four-year B-degrees in 2014, graduated on time.

For the 2014 cohort, the throughput of four-year B-degrees is higher than for ether three-year B-degrees or diploma qualifications. The proportion of African graduates in the 2014 cohort of undergraduate students is also higher for four-year B-degrees than for three-year B-degrees or diplomas. Although the proportion differs per qualification types, the largest proportion of students graduate in regulation time. At the same time, this is under 50% of the cohort in all qualification types.

If participation in academic practice is equated with rates of graduation, throughput rates for the 2014 cohort of undergraduate students in South Africa shows that at best 48% of students attain epistemic access in regulation time, and 67% after six years. In the worst scenario, 24% attain epistemic access in regulation time, and 55% after 6 years.

It is further notable that for the best scenario (67%) two additional years of study were analysed, while for the worst scenario (55%) analysis includes three years after regulation time. It is unclear from this study why this might be the case, given that the focus was not on comparing three with four-year qualifications. Many four-year qualifications are however professional qualifications, often with more stringent entry requirements, and this might mean that students are more focused when entering the qualification as well as during the qualification. On the other hand, three-year qualifications are generally more general. The reason might however be that the additional year of the degree programme allows students to settle into the university environment and learn to participate in academic practice, and it is evident that throughput after 4 years is more similar across all three qualification types (41%, 49%, 48%).

It would be worth examining this phenomenon in more detail in future to provide some insights with regard to throughput. For example, systematically comparing entry requirements, motivations to enter the degree programmes, teaching, learning and assessment, including staff to student ratios, in the degree programmes; and, in the context of Covid-19, digital access and home environment conditions and support.

### Participating institutions

To compare to the national picture provided above, undergraduate throughput rates for participating institutions are presented for the 2014 cohort below. Of the participating institutions, CUT does not offer three-year B-degrees, while UL, UP, UWC and Wits do not offer three-year diploma qualifications. UJ was the only institution to offer all three types of undergraduate qualifications.

The 2014 first-time entering cohort is presented as this is the latest audited data available from HEMIS at the time of analysis. Throughput rates in minimum time plus two years (M+2) were reported, since historical data analyses have shown that most students graduate within the minimum time plus two years after which the numbers that graduate become very low.

*Table 4: Throughput rates in M+2 years for different qualification types by race, 2014-cohort*

| Race | Three-year diplomas | | Three-year B-degrees | | | | | Four-year B-degrees | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CUT | UJ | UJ | UL | UP | UWC | WITS | CUT | UJ | UL | UP | UWC | WITS |
| **Total** | **43%** | **54%** | **59%** | **63%** | **54%** | **49%** | **63%** | **65%** | **59%** | **79%** | **60%** | **60%** | **57%** |
| **African** | 43% | 54% | 58% | 63% | 48% | 47% | 59% | 64% | 59% | 79% | 52% | 55% | 51% |
| **Coloured** | 40% | 48% | 55% | 100% | 48% | 51% | 63% | 74% | 49% | 89% | 48% | 59% | 75% |
| **Indian** | 33% | 58% | 68% | 50% | 50% | 53% | 68% | 100% | 65% | | 55% | 73% | 67% |
| **White** | 44% | 60% | 64% | | 60% | 52% | 69% | 90% | 59% | 67% | 67% | 77% | 72% |

Table 4 shows that UJ had the highest overall throughput rate for three-year diplomas (54%), UL and Wits for three-year B-degrees (63%), and UL for four-year B-degrees (79%). UWC had the lowest overall throughput rate for three-year B-degrees (49%) and Wits for four-year B-degrees (57%). The highest throughput rate for three-year diplomas was for White students at UJ (60%), and the lowest was for Indian students at CUT (33%). It is possible that the low headcount enrolment at CUT and UL (see Table 1) accounted for their relative success in B-degrees. On the other hand, undergraduate headcount at UWC did not differ significantly from UL (see Table 1), and their throughput was the lowest for three-year B-degrees

### Faculty

Tables 5, 6 and 7 present the throughput rates, disaggregated by race, for diplomas, three-year B-degrees, and four-year B-degrees for undergraduate students who enrolled in 2014. The national throughput for diplomas was 55%, with higher rates in humanities faculties and lower rates in science faculties. For three-year B-degrees, the national throughput was 60%, with higher rates in humanities faculties at some institutions. For four-year B-degrees, the national throughput was 67%, with higher rates in humanities faculties at certain institutions. The largest proportion of graduates completed their studies in regulation time, either at the end of three or four years.

When comparing throughput of three-year diploma qualifications at CUT and UJ, all races had higher throughput rates in the humanities faculty compared to the science faculty. In addition, when comparing institutional throughput of three-year diploma qualifications at UJ, all races had higher throughput rates in the humanities faculty, while only African students had equal throughput rates to the institutional average in the science faculty. These findings suggest that, regardless of race, students in humanities faculties had better throughput rates in three-year diploma qualifications compared to those enrolled in science faculties.

The analysis further highlights that in some instances, all races at an institution followed the same trend when compared to the national throughput. For example, at UWC, the throughput rates for African, Coloured, Indian, and White students enrolled in the humanities faculty were lower than the national average, aligning with the overall throughput of the humanities faculty at UWC. That trends are similar for all races in institutions suggests that race does not account for throughput rate.

*Table 5 - Throughput rate for diplomas by participating institution, faculty and race*

| | | | Throughput | | |
|---|---|---|---|---|---|
| **Institution** | **Faculty** | **Population Group / Race** | **M** | **M+1** | **M+2** |
| **CUT** | Humanities | A | 28% | 50% | 60% |
| | | C | 20% | 40% | 40% |
| | | W | 55% | 60% | 65% |
| | Humanities Total | | 31% | 51% | 60% |
| | Science | A | 29% | 36% | 39% |
| | | C | 21% | 29% | 29% |
| **UJ** | | W | 15% | 29% | 31% |
| | Science Total | | 26% | 34% | 37% |
| | Humanities | A | 35% | 53% | 59% |
| | | C | 67% | 67% | 67% |
| | | I | 100% | 100% | 100% |
| | | W | 100% | 100% | 100% |
| | Humanities Total | | 37% | 54% | 59% |
| | Science | A | 0% | 33% | 54% |
| | | C | 0% | 0% | 50% |
| | | W | 0% | 0% | 0% |
| | Science Total | | 0% | 32% | 54% |

*Table 6 - Throughput rate for three-year B-degrees by participating institution, faculty and race*

| | | | Throughput | | |
|---|---|---|---|---|---|
| **Institution** | **Faculty** | **Population group** | **M** | **M+1** | **M+2** |
| **UJ** | Humanities | A | 40% | 57% | 62% |
| | | C | 43% | 61% | 64% |
| | | I | 57% | 66% | 71% |
| | | W | 38% | 42% | 44% |
| | Humanities Total | | 40% | 56% | 61% |
| | Science | A | 8% | 25% | 38% |
| | | C | 13% | 53% | 60% |
| | | I | 13% | 47% | 61% |
| | | W | 34% | 52% | 62% |
| | Science Total | | 11% | 29% | 42% |
| **UL** | Humanities | A | 57% | 72% | 76% |
| | Humanities Total | | 57% | 72% | 76% |
| | Science | A | 19% | 41% | 50% |
| | | I | 0% | 0% | 0% |
| | Science Total | | 19% | 41% | 50% |
| **UP** | Humanities | A | 36% | 46% | 50% |
| | | C | 36% | 43% | 45% |
| | | I | 30% | 34% | 40% |
| | | W | 44% | 53% | 55% |
| | Humanities Total | | 41% | 49% | 53% |
| | Science | A | 7% | 22% | 31% |
| | | C | 20% | 31% | 37% |
| | | I | 21% | 36% | 42% |
| | | W | 25% | 38% | 44% |
| | Science Total | | 15% | 29% | 37% |
| **UWC** | Humanities | A | 20% | 36% | 43% |
| | | C | 27% | 39% | 47% |
| | | I | 37% | 50% | 57% |
| | | W | 35% | 38% | 41% |
| | Humanities Total | | 25% | 38% | 45% |
| | Science | A | 19% | 47% | 54% |
| | | C | 22% | 51% | 59% |
| | | I | 24% | 41% | 50% |
| | | W | 42% | 47% | 53% |
| | Science Total | | 21% | 48% | 56% |
| **WITS** | Humanities | A | 37% | 52% | 58% |
| | | C | 42% | 61% | 64% |
| | | I | 56% | 72% | 76% |
| | | W | 51% | 59% | 61% |
| | Humanities Total | | 42% | 57% | 61% |
| | Science | A | 30% | 48% | 52% |
| | | C | 38% | 75% | 79% |
| | | I | 42% | 57% | 60% |
| | | W | 62% | 73% | 74% |
| | Science Total | | 37% | 54% | 57% |

*Table 7 - Throughput rate for four-year B-degrees by participating institution, faculty and race*

| | | | Throughput | | |
|---|---|---|---|---|---|
| **Institution** | **Faculty** | **Population Group** | **M** | **M+1** | **M+2** |
| **CUT** | Humanities | A | 41% | 58% | 63% |
| | | C | 59% | 71% | 71% |
| | | W | 50% | 75% | 75% |
| | Humanities Total | | 42% | 59% | 64% |
| | Science | A | 53% | 72% | 72% |
| | | C | 100% | 100% | 100% |
| | | I | 100% | 100% | 100% |
| | | W | 100% | 100% | 100% |
| | Science Total | | 62% | 77% | 77% |
| **UJ** | Humanities | A | 44% | 56% | 59% |
| | | C | 0% | 0% | 0% |
| | | W | 50% | 50% | 50% |
| | Humanities Total | | 44% | 55% | 58% |
| **UL** | Humanities | A | 73% | 82% | 85% |
| | Humanities Total | | 73% | 82% | 85% |
| | Science | A | 67% | 80% | 84% |
| | Science Total | | 67% | 80% | 84% |
| **UP** | Humanities | A | 51% | 62% | 63% |
| | | C | 50% | 50% | 50% |
| | | I | 33% | 56% | 67% |
| | | W | 71% | 79% | 80% |
| | Humanities Total | | 61% | 71% | 73% |
| | Science | A | 11% | 30% | 44% |
| | | C | 0% | 0% | 0% |
| | | I | 67% | 67% | 67% |
| | | W | 39% | 50% | 56% |
| | Science Total | | 35% | 47% | 54% |
| **UWC** | Humanities | A | 19% | 38% | 43% |
| | | C | 28% | 46% | 50% |
| | | I | 25% | 55% | 55% |
| | | W | 31% | 38% | 38% |
| | Humanities Total | | 24% | 42% | 47% |
| **WITS** | Humanities | A | 55% | 64% | 66% |
| | | C | 61% | 72% | 78% |
| | | I | 77% | 81% | 82% |
| | | W | 63% | 69% | 69% |
| | Humanities Total | | 59% | 67% | 69% |

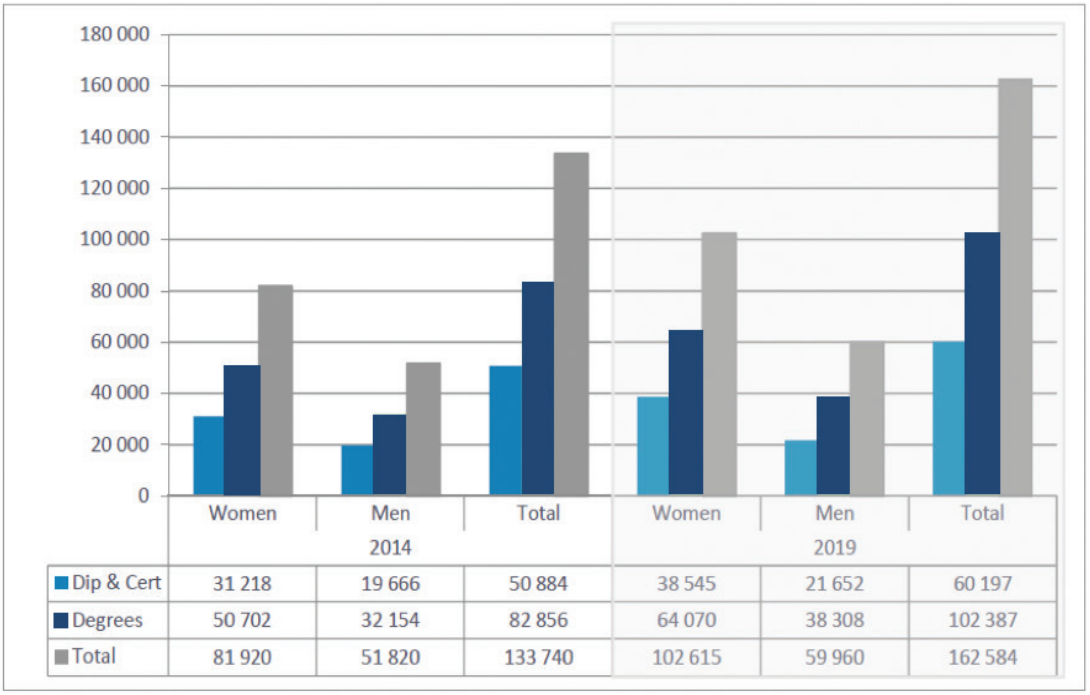
It is important to consider how throughput is measured and viewed, as it can influence the interpretation of the findings. For instance, White students enrolled in the humanities faculty at UJ had a lower throughput than the faculty average. However, this observation should be contextualised, as there were only a small number of White students enrolled in the humanities faculty, and a significant portion of them dropped out in the first year. Adjusting for those who dropped out, the throughput rate for white students who enrolled at UJ in 2014 increased to 77%. This suggests that the reporting method used by the CHE may not fully capture the complexities of the higher education sector.

Similarly, the throughput rates for white, Coloured, and Indian students in the natural sciences faculty at Wits were higher or equal to the national average, despite the overall throughput rate for the science faculty at Wits being lower than the national average. These discrepancies highlight the need for further investigation and explanation.

Table 7 examines the throughput rates for four-year B-degree qualifications. While all participating institutions offered this qualification type in their humanities faculties, UJ, UWC, and Wits did not have students enrolled for this qualification type in their science faculties. The overall throughput rate for this qualification type was only higher than the national average at UL.

Table 5, 6 and 7 provide insights into the throughput rates for diploma and B-degree qualifications in participating institutions. It emphasises the variations in throughput rates across faculties, institutions, and races. The findings raise questions about the adequacy of the current reporting method in capturing the true state of the higher education sector and highlight the need for a more nuanced analysis of throughput rates.

**Throughput in higher education institutions by gender**




| | Women | Men | Total | Women | Men | Total |
|---|---|---|---|---|---|---|
| | 2014 | | | 2019 | | |
| Dip & Cert | 31 218 | 19 666 | 50 884 | 38 545 | 21 652 | 60 197 |
| Degrees | 50 702 | 32 154 | 82 856 | 64 070 | 38 308 | 102 387 |
| Total | 81 920 | 51 820 | 133 740 | 102 615 | 59 960 | 162 584 |

*Figure 10: Undergraduate qualifications awarded by gender for 2014 and 2019*

Based on the absolute numbers in Figure 10, in 2019, 63% (102 615) of graduates were women, while 37% (59 960) were men. The difference in women (62%) and men (38%) graduates also increased slightly since 2014, according to the absolute numbers depicted in Figure 10 (CHE 2021, p.19). In 2010, 61% of undergraduates enrolled were women and 39% were men (CHE 2017, p.19). If as the White Paper upholds, graduation provides skills for the economy and postgraduate students for the system (DHET 2020a, p.13), the gendered enrolment and

graduation rates should be impacting on labour market supply as well as the postgraduate pipeline. Gendered patterns of epistemic access are not the focus of this study, it should, however, be taken up as a point of investigation in further studies. The gendered distribution of educational outputs across the education spectrum can be significant in sociological terms.

Table 8 shows the throughput rates for undergraduate three-year diplomas, three-year B-degrees, and four-year B-degrees by gender for the 2014 first-time entering cohort. Females had higher throughput rates in all categories. Females at UJ had the highest overall throughput rate, while males at CUT had the lowest for three-year diplomas. Females at UL had the highest throughput rate for three-year and four-year B-degrees, and UWC and Wits had the lowest throughput for three-year and four-year B-degrees respectively. The range between female and male students varied across institutions

*Table 8: Throughput rates in M+2 years for different qualification types by gender*

| Gender | Three-year diplomas | | Three-year B-degrees | | | | | Four-year B-degrees | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CUT | UJ | UJ | UL | UP | UWC | WITS | CUT | UJ | UL | UP | UWC | WITS |
| **Total** | 43% | 54% | 59% | 63% | 54% | 49% | 63% | 65% | 59% | 79% | 60% | 60% | 57% |
| **Female** | 51% | 61% | 65% | 70% | 59% | 54% | 67% | 72% | 68% | 84% | 71% | 62% | 69% |
| **Male** | 37% | 48% | 51% | 55% | 47% | 42% | 57% | 55% | 48% | 73% | 50% | 54% | 43% |

Table 8 illustrated the throughput rates for diplomas and B-degrees by gender for undergraduate students who enrolled in 2014. One notable finding is that male student throughput was consistently lower than female student throughput in both diploma and B-degree qualifications. This trend was observed across different institutions and faculties, indicating a gender disparity in academic performance. In particular, the difference in throughput between male and female students was more pronounced in humanities faculties compared to science faculties. For instance, in humanities faculties at institutions like CUT and UJ, the difference in throughput between male and female students was 27% and 30% respectively, compared to only 4% and 3% in science faculties. An exception was UL, where the difference in throughput between female and male students in the science faculty was larger than in the humanities faculty.

Furthermore, when comparing the institutional throughput to the national average, it was evident that male student throughput was generally lower than the national average, except for male students enrolled in the UL humanities faculty. Conversely, female student throughput was higher than the national average in most instances, except for the CUT and UP science faculties. These findings shed light on the varying levels of success for male and female students in achieving their educational goals.

Irrespective of gender, the throughput of students enrolled for three-year B-degrees in humanities faculties was better than those enrolled in similar qualification types in science faculties at the same institution. An explanation might be that humanities faculties provide a more conducive environment for students compared to science faculties. In terms of specific institutions, UP and Wits, had higher throughput rates for four-year B-degrees in their humanities faculties compared to the national average. Conversely, CUT, UJ, and UWC had lower throughput rates for this qualification type in their humanities faculties. The science faculties at UP had lower throughput rates, while UL and CUT had higher throughput rates compared to the national average. These findings emphasise the variations in student success across different institutions and faculties.

Overall, the table underscores the importance of addressing the gender disparity in student throughput and the variations in success rates across different fields and institutions. By identifying these patterns, educational institutions can implement targeted interventions and support systems to enhance student success and ensure equal opportunities for all students, regardless of their gender or chosen field of study.

*Table 9: Throughput by faculty, gender and qualification type across participating institutions*

| | | | Three-year diplomas | | | Three-year B-degrees | | | Four-year B-degrees | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Institution** | **Faculty** | **Gender** | **M** | **M+1** | **M+2** | **M** | **M+1** | **M+2** | **M** | **M+1** | **M+2** |
| **CUT** | Humanities | F | 39% | 60% | 72% | | | | 45% | 64% | 71% |
| | | M | 20% | 39% | 45% | | | | 38% | 51% | 54% |
| | Humanities Total | | 31% | 51% | 60% | | | | 42% | 59% | 64% |
| | Science | F | 26% | 36% | 39% | | | | 71% | 82% | 82% |
| | | M | 27% | 31% | 35% | | | | 44% | 67% | 67% |
| | Science Total | | 26% | 34% | 37% | | | | 62% | 77% | 77% |
| **UJ** | Humanities | F | 45% | 62% | 70% | 45% | 61% | 65% | 46% | 57% | 60% |
| | | M | 23% | 39% | 40% | 28% | 44% | 51% | 35% | 50% | 50% |
| | Humanities Total | | 37% | 54% | 59% | 40% | 56% | 61% | 44% | 55% | 58% |
| | Science | F | 0% | 33% | 55% | 11% | 33% | 51% | | | |
| | | M | 0% | 30% | 52% | 10% | 26% | 36% | | | |
| | Science Total | | 0% | 32% | 54% | 11% | 29% | 42% | | | |
| **UL** | Humanities | F | | | | 62% | 77% | 80% | 76% | 84% | 86% |
| | | M | | | | 48% | 66% | 71% | 69% | 80% | 84% |
| | Humanities Total | | | | | 57% | 72% | 76% | 73% | 82% | 85% |
| | Science | F | | | | 22% | 46% | 58% | 73% | 86% | 90% |
| | | M | | | | 16% | 36% | 44% | 59% | 72% | 76% |
| | Science Total | | | | | 19% | 41% | 50% | 67% | 80% | 84% |
| **UP** | Humanities | F | | | | 45% | 55% | 58% | 66% | 75% | 76% |
| | | M | | | | 29% | 36% | 40% | 40% | 54% | 57% |
| | Humanities Total | | | | | 41% | 49% | 53% | 61% | 71% | 73% |
| | Science | F | | | | 17% | 33% | 40% | 38% | 50% | 55% |
| | | M | | | | 13% | 25% | 32% | 28% | 40% | 51% |
| | Science Total | | | | | 15% | 29% | 37% | 35% | 47% | 54% |
| **UWC** | Humanities | F | | | | 27% | 41% | 48% | 25% | 44% | 49% |
| | | M | | | | 21% | 31% | 38% | 22% | 40% | 43% |
| | Humanities Total | | | | | 25% | 38% | 45% | 24% | 42% | 47% |
| | Science | F | | | | 26% | 62% | 68% | | | |
| | | M | | | | 16% | 34% | 42% | | | |
| | Science Total | | | | | 21% | 48% | 56% | | | |
| **WITS** | Humanities | F | | | | 45% | 60% | 64% | 65% | 73% | 74% |
| | | M | | | | 35% | 49% | 54% | 45% | 52% | 55% |
| | Humanities Total | | | | | 42% | 57% | 61% | 59% | 67% | 69% |
| | Science | F | | | | 43% | 60% | 64% | | | |
| | | M | | | | 32% | 48% | 51% | | | |
| | Science Total | | | | | 37% | 54% | 57% | | | |

### Throughput in higher education institutions by NSFAS recipient

Table 10 is an illustration of the percentage throughput rate in minimum time plus two years (M+2) for undergraduate qualifications by NSFAS recipients versus non-recipients for the 2014 first-time entering cohort.

For diploma studies, students receiving NSFAS had higher throughput rates across the participating institutions, with NSFAS students at UJ achieving the highest throughput rate (62%) and non-NSFAS students at CUT showing the lowest throughput (42%).

For three-year B-degrees, UL had the highest throughput rate for NSFAS students (69%) and Wits for non-NSFAS students (59%). At UJ and UL the throughput rate for NSFAS students was higher than non-NSFAS students, while at UP and Wits the throughput rate of non-NSFAS students was higher. Throughputs at Wits were similar across the two categories, but the throughput rate did not seem to match the overall throughput rate of Wits. This could be because of the quality of the NSFAS data.

Regarding throughput for four-year B-degrees UL had the highest throughput rate for NSFAS and non-NSFAS students. Across all participating institutions, the throughput rate amongst NSFAS students was higher than non-NSFAS students. However, as above, the throughput rates did not match the overall throughput rate at some institutions.

*Table 10[9] - Throughput rates in M+2 years for different qualification types by NSFAS status*

| NSFAS recipient or not | Three-year diplomas | | Three-year B-degrees | | | | Four-year B-degrees | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | CUT | UJ | UJ | UL | UP | WITS | CUT | UJ | UL | UP | WITS |
| Total | 43% | 54% | 59% | 63% | 54% | 63% | 65% | 59% | 79% | 60% | 57% |
| Non-NSFAS | 42% | 53% | 57% | 50% | 55% | 59% | 63% | 55% | 67% | 60% | 56% |
| NSFAS | 49% | 62% | 65% | 69% | 46% | 58% | 70% | 69% | 84% | 69% | 59% |

Figure 11 is drawn from Statistics South Africa (Stats SA 2017, p.13) and illustrates that the average annual household consumption varies between households with heads from different races. When a household head is white, that household consumes just over four times more, on average, than households with a black African head. Similarly, Figure 12 shows that the average income of household heads differs markedly depending on their race (Stats SA 2017, p.14).

9 Tables 8, presenting the throughput rates by NSFAS recipients, do not include UWC because no data were available for this institution in this regard.

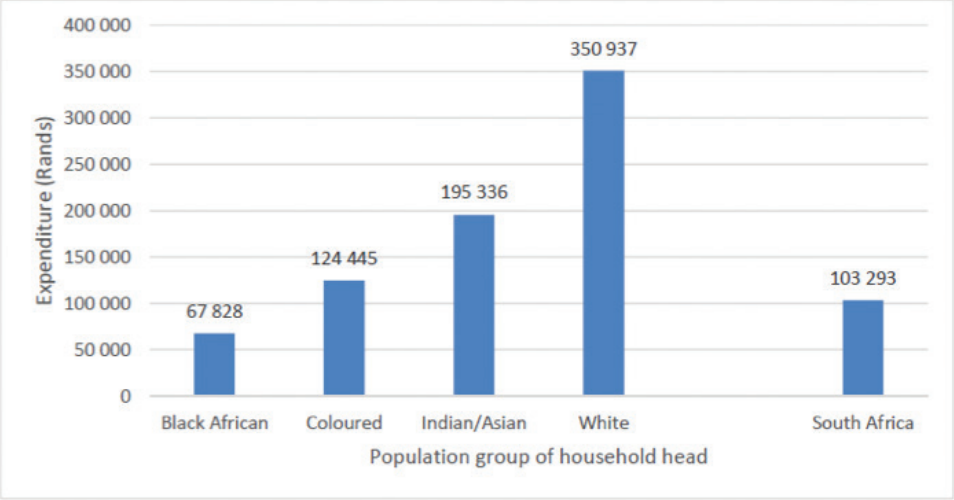



*Figure 11: Race of household head*

*Table 11: Source of income of household heads by race*

| Source of income | Black African | | Coloured | | Indian/Asian | | White | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Average income | % | Average income | % | Average income | % | Average income | % | Average income | % |
| Income from work | 69 094 | 74,3 | 131 699 | 76,2 | 215 784 | 79,4 | 300 498 | 67,6 | 100 246 | 72,6 |
| Income from capital | 842 | 0,9 | 1 364 | 0,8 | 2 173 | 0,8 | 16 184 | 3,6 | 2 451 | 1,8 |
| Pensions, social insurance, family allowances | 8 921 | 9,6 | 12 260 | 7,1 | 10 028 | 3,7 | 30 739 | 6,9 | 11 378 | 8,2 |
| Income from individuals | 2 194 | 2,4 | 2 430 | 1,4 | 3 309 | 1,2 | 5232 | 1,2 | 2 542 | 1,8 |
| Other income | 1 261 | 1,4 | 2 265 | 1,3 | 2 323 | 0,9 | 6 520 | 1,5 | 1 886 | 1,4 |
| Imputed rent on owned dwelling | 10 671 | 11,5 | 22 747 | 13,2 | 38 005 | 14,0 | 85 271 | 19,2 | 19 665 | 14,2 |
| **Total** | **92 983** | **100,0** | **172 765** | **100,0** | **271 621** | **100,0** | **444 446** | **100,0** | **138 168** | **100,0** |

Based on the income and expenditure statistics reported by Statistics South Africa in 2017, more students from households where the head is black African are likely to be economically disadvantaged and hence eligible to receive the NSFAS grant. Indeed, at the current R350 000 threshold for eligibility to receive NSFAS, students in the average African, Coloured and Indian households would be eligible while the average White household would not. Strikingly however, the average household income of South African households in 2017 was less than half of the NSFAS threshold. Being a NSFAS grantee was one of the requirements of the students that were sampled to participate in interviews for case studies.

### Important insights and implications

The analyses of statistical data from public higher education institutions in South Africa presented here demonstrates that as one moves from the national to the institutional to the faculty level, particular patterns emerge regarding enrolment and throughput disaggregated by race and gender. In addition, based on what is emerging from these patterns, we propose further categories that ought to be considered when data from the higher education sector are reported for policy makers and university management structures to make informed decisions about specific interventions that could enhance epistemic access and success in the sector.

At the national level, enrolment and throughput disaggregated by race in the higher education sector in South Africa mirrors the national demographic distribution. For example, African students comprise over 79% of the higher education student headcount and 79% of the demographic distribution in South Africa. The patterns of headcount enrolment disaggregated by race at participating institutions do not conform to the national trend matching demographic distribution. At three institutions, CUT, UJ and UL, over 80% of the undergraduate student population are African. At Wits under 70% of the undergraduate student population are African. At UP and UWC, under 50% of the undergraduate student population are African. This may reflect regional demographics or relate to entry requirements at some of the former HAIs, and the relationship between supply and demand, and the limitations of space and competition of what are perceived to be high quality public institutions. This means that there is perhaps little validity in comparing throughput by race.

Regarding other races, further anomalies were observed. For example, whereas in 2019 3.7% of the national undergraduate student population was Indian, 13% of the undergraduate students at Wits were Indian. Whereas in 2019 5.8% of the national undergraduate student population was Coloured, 47% of the undergraduate students at UWC were Coloured. Whereas in 2019 10.7% of the national undergraduate student population was White, 42% of the undergraduate students at UP were White. It is of course possible that the race trends observed in these institutions mirror the racial patterns of the immediate geographic location of the institution. Regarding Wits, UWC and UP, this seems entirely plausible. Similarly, for CUT, UJ and UL these race headcount trends could reflect the surrounding geographic landscape.

While not the ambit of this chapter, it is important to raise an obvious question: To what extent has transformation occurred when it is measured in terms of demographic reallocation at institutions, and what does this mean for the South African nation? The ways in which the HEMIS data are reported have not linked socio-economic or geographic location data to race. It is, therefore, not possible to determine the extent to which class intersects with race in relation to headcount enrolment at any of the institutions. Appreciably though, if there is an intersection, the nature of transformation might be qualitatively different with implications for individual institutions, the higher education sector, and social reproduction of South African society.

Moreover, the concentration of White, Coloured and Indian students at specific HEIs does not bode well for social cohesion in South Africa. As is becoming evident from various social spaces, South Africans as a nation have not achieved unity in their diversity. Racialised social interaction remains fundamentally ingrained in the education system. This phenomenon requires careful examination if the education system is to be a catalyst of racial redress in this country (see Department of Education 1995, 1997).

If racialised social interaction is intersected with racialised, classist social interaction that is further intersected by geographic location, the capacity of South Africans to come together as a nation is unlikely. Statistical analysis of higher education ought to adopt an intersectional approach to disaggregation to identify the faultline in the transformation of the education system. Continuing to analyse race and gender as isolated categories of analysis regarding headcount and throughput presents a one-dimensional view of transformation in the higher education system. The absence of interrogating class and geographic location is, moreover, a major oversight, particularly considering the unequal composition of South African society.

For the most part, the headcount at faculty level in participating institutions does mirror the institutional trends of race, with a few exceptions. For example, whereas 95% of the undergraduate headcount at CUT are black, 10% of the headcount in the CUT science faculty is White. Whereas 42% of the undergraduate headcount at UWC are African, 60% of the headcount in the science faculty headcount is African. It is however unclear why this might be the case. Case studies did not set out to examine the distinct racial distributions between the humanities and natural science faculties. It is also not clear whether there are or might be implications. In this instance it might also be intersecting categories that hold more meaning than race on its own.

The throughput rate in undergraduate qualifications provides a somewhat different representation of educational outcomes by race. At the national level, the throughput rate for African students is lower than White students for all undergraduate qualifications at minimum time (M) to completion as well as minimum time plus two years (M+2) . The difference decreases for all qualification types from M to M+2. This suggests that on average African undergraduate students might require more time to settle into university life and participate in academic practice.

However, this is not true for all African undergraduate students, many of whom complete their qualification within the minimum time. Moreover, undergraduate students from all races are graduating at M+2 and are dropping out. This trend suggests that additional categories of analysis ought to be extracted from the data to determine points of intersection with throughput. It might for instance be insightful to interrogate throughput in relation to the extent to which students achieved the entry requirements for programmes. In addition, how throughput correlates with the school quintile in which students matriculated could raise notable results. Given that we know race is a constructed social category, it would stand to reason that alternative social categories have more explanatory power regarding any social phenomenon, including throughput trends in higher education institutions. As such, building regression models that control for confounding factors, for instance, could greatly improve our understanding of throughput and, by implication, success in higher education.

Most races' throughput at the institutional level for the three-year diploma and B-degree qualifications are within 6% of the institutional average. For the four-year B-degree, the ranges from the institutional average and between race are wider at all institutions. This too was not an objective that case studies set out to explain, and hence will require further examination to understand the related reasons and implications.

At the national level, enrolment and throughput disaggregated by gender in the higher education sector in South Africa illustrated higher levels of female participation in relation to the national demographic distribution of gender. Female students comprise 60% of the headcount enrolment at HEIs and about half of the population between the ages of 15 and 24; that is, the population that would generally be expected to enrol in higher education. About gender, at the national level, higher education headcount has transformed from the perspective of patriarchal educational outcomes.

Similar patterns of headcount distribution by gender were observed for all participating institutions. At UWC the range was the widest, and at UJ the range with the smallest. However, all institutions enrolled more female than male students.

As one moved down to the level of the humanities and natural sciences, the observations change at some institutions more than others. However, on average, the difference between female and male enrolment in humanities faculties is 42% whereas the average difference in natural science faculties is 2.5%. At UJ, UL and Wits, there were more male than female students enrolled in their natural science faculties. Thus, while the gender distribution at the national level illustrates a transformed system regarding gender, at the humanities and natural science faculty level at participating institutions, a more nuanced picture emerges.

These findings point to the importance of intersecting national level data with faculty level or fields of study level data. The case studies are likely to shed light on what these distributions mean for experiences of participating in academic practice at the difference faculties.

When throughput is considered, educational outcomes at the undergraduate level in higher education further point to a transformed system from this perspective; 63% of women completed their qualifications within the minimum time plus two years. At all participating institutions, the throughput of female students is better than male students in all qualification types. Similarly, at all participating institutions, in all faculties and across qualification types, the throughput of female students is higher than male students. These data point to gender being a valuable node of intersection to analyse other categories of analysis such as class, using school quintile or being a NSFAS recipient as a proxy as well as the extent to which entry requirements were attained.

At the national level, race and gender trends for headcount enrolment and throughput demonstrate racial and gender transformation of the higher education sector. When the headcount enrolment and throughput of participating institutions are considered, these trends shift regarding race but are maintained regarding gender. As one drills down to faculty level data within institutions the trends for race remain like the institutional trends but shift regarding gender.

## Conclusion

This chapter provided a statistical overview of headcount and throughput in the South African higher education sector at the national, institutional and humanities and natural science faculty levels based on data from HEMIS. Headcount and throughput were disaggregated by race and gender at all levels, and NSFAS at institutional levels.

At a national level, the findings reveal that in relation to race and gender, headcount and throughput (particularly at M+2) present an image of a transformed higher education landscape. A level down, at participating institutions, disaggregating headcount by race demonstrates continued patterns of historical and geographic legacies. When one considers the implications of the shifts in demographic profile of participating institutions, it is noteworthy that the national picture is not replicated exactly at all institutions. Like public schools, historically White institutions have ironically become the most racially diverse spaces. Race as an historical legacy remains apparent in the demographic shape of most participating institutions, the only exception is UJ.

At the level of humanities and natural science faculties at participating institutions, it was demonstrated that the gender distribution is skewed in relation to the national and institutional headcount. While the proportion of female students is higher than male students at the national and participating institutional level, the difference is much higher in humanities than natural science faculties. Indeed, in three natural science faculties male students outnumber female students. At the same time, at all levels female students have a better throughput rate than male students.

The chapter argues that disaggregating national, institutional and faculty level headcount and throughput by race and gender are illustrative of important trends in the South African higher education landscape. At the same time, however, we surmise that additional categories, such as the extent to which students have met entry requirements, geographic location, as well as school quintile, ought to be considered to sketch a comprehensive representation of the higher education landscape. This does not mean that headcount and throughput ought not to be described in relation to gender and race, only that on their own, they do not offer a complete analysis of the higher education landscape. In the narratives of students presented in the case study chapters, the importance of including additional categories of analysis is elaborated.

# Chapter 4

## Epistemic Access and Success at a University of Technology: The Case of the Central University of Technology

### Introduction

Post-1994 in South Africa, higher education policies were intended to widen participation and formal access especially for communities previously excluded. Widening formal access triggered calls to address epistemic access and success, including enhancing retention and throughput rates, as well as institutional policies and practices that facilitate accommodating individuals from disadvantaged communities. This chapter commences by outlining concepts that frame the case study in addition to epistemic access followed by the description of the case study. The chapter ends with a conclusion which highlights the key insights made in this institutional case.

### Concepts framing the CUT case study

The concepts discussed in this section aim to capture the potential influence and impact of both the institution and the individual on student experiences. As outlined in chapter two, the distinction between official, pedagogic and social domains to delineate various dimensions of education institutions generally, and higher education institutions (Bernstein 1999, p.2000) in particular, are useful conceptual constructs for analysing student experience. Although the domains are helpful to analyse student experiences, students navigate them at the same time. Students, when articulating their experience can also be illustrating how they all interact with each other at the same time. Cross and Atinde (2015, p.316) report how students narrate that they make their own decisions: '*I have to take my own decisions and not let other people influence me negatively* (Tsepo)'. They are also adaptive; '*I can easily adapt to any situation because I know what I want to achieve here at the university (Lerato)*'. Decision-making and adaptivity would be relevant to all domains and show what students require to navigate university life.

### Student experience at CUT: Findings and analyses

The context of the university and the students' backgrounds shape their experiences of university life, thereby situating their participation in academic practice. One cannot leave one's background at the door of an institution; even when one enters it to learn. According to social constructivist theories, this is even more important when one enters the institution to learn.

### Geography and socio-economic conditions

In 1981, the Technikon Free State, the predecessor of CUT, commenced its operations intending to produce graduates with the skills and competencies that are required to advance and support industrialisation of the region. The levels and intensity of these needs have changed over time, but the core socio-economic or regional development mandate of the university remains unchanged (CUT, 2016). CUT is the second smallest of the five South African Universities of Technology (UoTs) and is located, as the name suggests, in the Central Region of South Africa's Free State province.

A support staff member (01_AD01_09) confirmed this intention has been realised regarding the Free State province, reporting that CUT

draws students from Phuthaditjhaba, QwaQwa area, and Botshabelo; all in the Free State province. In addition, the staff member observed that students are from predominantly disadvantaged areas of Bloemfontein, Welkom, Waterville and Hermann, all in the Free State province. Phuthaditjhaba, QwaQwa, Thaba Nchu and Botshabelo are mainly rural areas situated far from the Bloemfontein campus of CUT and characterised by unemployment and poverty. Bloemfontein is surrounded by townships and informal settlements from where the university recruits its students. Welkom is a rural mining area surrounded by townships and informal settlements.


*Figure 12: Map of Bloemfontein, Welkom, Thaba Nchu and Botshabelo (Du Plessis, 2010)*

The participants observed that students enrolled at CUT are largely from disadvantaged backgrounds (Quintile 1 schools). A support staff member stated:

> *'... given the context or where we find ourselves, we do have a lot of students from poor disadvantaged communities entering university and some of whom would never be admitted elsewhere.'* (01_AD01)

In the context of CUT, this includes students from rural villages, single parent families and schools with limited resources. The academic, administrative and support staff reported that in general, students in the Faculty of Health and Environmental Sciences (FHES) and Faculty of Humanities (FH) at CUT come from socially and economically deprived areas and are historically disadvantaged students, the majority being black. In terms of racial breakdown, an academic staff member in one of the modules in the FHES revealed that most students in the modules are black and that only recently has one white student registered. She noted that it was the first time in seven or eight years that she has had a white student in her class (01_AC02). Chapter 3 illustrated that on average the proportion of the black students enrolled in the two faculties included in this study is higher than 95%.

The racial group or identity of students is not defined by their experiences on campus. Their socio-economic position, related to the distinct intersection of geographic and economic location, demarcates the capability of students at CUT to engage in academic practice. The distinct intersection emerged from the interview data of students and staff, who report that limited access to public transport and Wi-Fi connectivity

together with an environment not conducive to studying, are critical features associated with this intersection. Students from disadvantaged backgrounds bear a large load of domestic responsibility that contributes to their home environments not being conducive to studying or focusing on academic practices. Features of students' background relate to their location in low socio-economic, rural and/or semi-urban areas in the Free State province of South Africa.

Participants' inputs suggest that the science and humanities faculties do not necessarily enrol students from the same socio-economic background. For instance, a support staff member surmised that there is a difference between students in the two faculties: *more of the students that are from privileged backgrounds are in health sciences (sic) as compared to humanities that enrols predominantly the students from rural areas* (01_AD01).[10]

While a student from Health Sciences, endorsed the geographic and economic background during an interview: *I grew up in Thaba Nchu, a small town in the Free State with my grandmother and my other cousins. My grandmother was a shebeen owner and that's how we managed to survive through high school* (01_SS03).[11]

One student revealed that she comes from a big family of four children and her mother is a single parent. This Bachelor of Education (BEd) student revealed that her mother was a street vendor but *ensured that every day [they] have a meal – we struggled a lot when I was still young* (01_HS08).

While the support staff member might be correct in reporting that more students from the science faculty are from privileged backgrounds, it would appear that 'privilege' itself is relative to the context one is in. The science student is not from an urban area, neither was his caregiver formally employed. At the same time, there appears to have been sufficient resources to access the necessary requirements for higher education success. The same is true for the humanities student even though it was not always the case. The relative socio-economic privilege of students in the science faculty could provide a dimension of the explanation of their higher success rate in four-year B-degrees. In other words, disadvantage cannot be viewed as a blunt marker; there is relative privilege within communities often viewed as one dimensionally disadvantaged.

Given students' backgrounds, the location of CUT is an enabling factor in them achieving success in higher education. The physical proximity of CUT to their home provides formal access which in turn provides the basis of success and epistemic access. CUT has two campuses, one located in Bloemfontein, the judicial capital of South Africa and capital of the Free State province, and Welkom, a major gold mining locality in the Free State province. A Clinical Technology studented points out that she applied to CUT because it was going to cost her less as she stays in a township near Bloemfontein (01_SS05). The student expresses the advantage of having access to an institution within travelling distance.

10 Interview codes are used to maintain student anonymity. The first number represents one of the participating institutions. AD indicates that the interview was conducted with university staff member from an Academic Development or Support unit at the institution. The second number represents the order in which the participant in a particular category was interviewed.

11 Interview codes are used to maintain student anonymity. The first number represents one of the participating institutions. SS (science student) or HS (humanities student) The second number represents the order in which the participant in a particular category was interviewed.

The geography and socio-economic conditions of student experience at CUT reinforces the 'requirement' of formal access to higher education. While the post-1994 democratic dispensation opened the doors of learning to anyone, irrespective of population group or race, geography and socio-economic conditions continue to be at least two of the barriers that prevent entry to all. 2 741 students received bursaries from CUT funds in 2015 (CUT, 2015) to promote not only access to higher education but specifically for students from disadvantaged backgrounds. From its meagre budget, CUT allocated R16 446 000 for student bursaries (CUT, 2015).

Furthermore, retention and the throughput rate at CUT were linked with funding or lack thereof. The staff concurred that NSFAS has a direct bearing on retention and the throughput rate arguing further that students are likely to drop out or discontinue their studies without this government funding scheme.

While access to funding impacts on student experiences of the official, pedagogic and social domains once at the institution, they are also significant to explain the conditions of those who arrive in the first place. Formal access continues to challenge in South Africa and has to be understood as a critical dimension of epistemic access and not a distinct element thereof.

### Institutional and faculty mandates and student success factors

As a UoT, CUT has a specific mandate: it is tasked with preparing students to enter specific occupations and careers as technologists and technicians. The two CUT campuses deliver education and training in Science, Technology, Engineering, and Mathematics (STEM); as well as Management Sciences, Humanities and Education to undergraduate and postgraduate students (CUT, 2015). CUT offers higher education and training in applied sciences in four faculties: Engineering and Information Technology; Health and Environmental Sciences; Humanities; and Management Sciences (CUT, 2016).

Curricula at UoTs, including at CUT, are underscored by the attainment of skills and competencies, whereas curricula of professional fields in research-based institutions offer both professional skills and conceptual knowledge. In other words, curricula at CUT favour applied knowledge intended to prepare graduates for careers in specific fields. This could mean students who register at CUT are motivated by the capability to enter a profession upon completing their qualification. This focus provides a reason for their success at mastering their academic practice and attaining epistemic access.

An academic staff member indicated that professionals in the field of Environmental Health are often invited as guest lecturers to share practical examples with students on what they will be expected to do when they leave the university and enter their chosen careers (01_AC07)[12]. This corroborates the idea that the nature of the curricula at UoTs, like CUT, are focused on employment as a strong basis of student success.

Work integrated learning (WIL) is a distinctive feature of the curricula at UoTs whose mandate is preparing students for employment situations and careers. WIL is intended to reinforce the applied knowledge in the curricula of UoTs. During WIL, students are placed in workspaces to gain practical knowledge on the job. Unlike traditional universities (except for teacher education programmes), academic lecturers do not maintain complete control over what is learnt by students at UoTs like CUT. Students' consistent engagement with the world of work with the integration of academic practice keeps them motivated. The distinctive features of curricula regarding guest lecturers from industry and WIL are important aspects of student experiences within the pedagogic domain at CUT.

12 Interview codes are used to protect participants anonymity. The first number represents one of the participating institutions. AC indicates that the interview was conducted with and Academic staff member in either the science or humanities faculty at a university staff. The second number represents the order in which the participant in a particular category was interviewed.

For four-year B-degrees, the throughput rate in science is higher than in humanities. This could be attributed to the higher matric scores required for admission into science programmes. For example:

> *For our specific programme [Clinical Technology], students need minimum points of about 30 and at least have level 4 for Math as well as Physical Sciences and Life Sciences if they wish to be considered for certain programmes in the FHES* (01_AC05).

The academic further explained that:

> *… since their programmes deals with human subjects, students who are strong in Sciences, Mathematics, Physical Science, Life Sciences are targeted … students should have a good understanding and grasp of specific subjects* (01_AC05).

According to academic staff, the FHES does not have a problem attracting students with a strong scientific background to be part of Clinical Technology (01_AC05). A support staff member, referring to students who performed well academically with entry scores above 30 points, explained that the FHES are recruiting the cream of the crop (01_AD01). An administrator at FHES reported that students adjust quite well and fast to the science faculty since they come with, or already have, a background in the science subjects (01_AD04).

Conversely, the general admission requirements in FH are that the candidate should have a National Senior Certificate with endorsement for admission to a bachelor's degree and a minimum pass mark of 50% in mathematics (CUT, 2017). Humanities enrols students with generally low scores in mathematics and sciences, according to one support staff member (01_AD01). Higher admission requirements imply that students are more rather than less prepared for higher education studies. The extent to which institutions, faculties and programmes comply with entry requirements as well as the nature of such requirements could be an important indicator of student success. Statistical analysis of this indicator are seldom discussed in detail and depth in either the academic research or grey literature related to progression and pass rates. Closer attention to the relationship between entry requirements, compliance to entry requirements and throughput is needed in statistical analyses of the higher education sector.

Enrolment rate adds another dimension to the puzzle of heightened success levels between the faculties for four-year B-degrees at CUT. The enrolment rate of the science faculty is much lower than the humanities faculty. The humanities faculty enrolled over 14 times more students than the science faculty in four-year B-degrees in 2014. Given the much lower enrolment, it stands to reason that class sizes are smaller, and students get more personal and individualised attention in the science faculty as opposed to the humanities faculty. According to one lecturer, in Bio-Medical Technology:

> We have a total amount of 40 students per year group and about two to three students failing the subject in total (01_AC05).

The Health Professions Council of South Africa (HPCSA) caps the intake of students into Bio-Medical Technology to 40 per year. A lecturer in the FHES further indicated that during classes, they are able to interact with students on a personal level and therefore this enables the lecturers to get to know students and their personalities quite easily (01_AC05). The significance of keeping a good rapport between the lecturers and students in the context of the knowledge structure of Clinical Technology was articulated as follows by an academic staff member in the programme:

*Because there is a good connection between the theoretical and the practical part in my specific subject, it is easy to address the gap between ourselves and students. This makes it quite easy for myself because when I teach theory, I provide pictures and perform practical demonstration physically showing students in the class about a specific procedure and students then immediately make that connection between the theory and the practical* (01_AC05).

Consequently, interpreting the difference in throughput between the two faculties cannot be attributed to entry requirement alone. This is not to say that entry requirements do not contribute to explaining the throughput rate, but that it is not the only dimension.

These throughput rates both disrupt and confirm the efficacy of under-preparedness and the articulation gap. Clearly in the FHES at CUT, students who have met the entry requirements are able to cope with the programme requirements, given the throughput rate of the science B-degrees at CUT; 77% complete the programme in the minimum time. A lecturer in the National Diploma in Environmental Health module offered in the FHES indicated that the throughput rate is relatively high, about 80% in that department even though some students are struggling in other subjects such as Epidemiology and Microbiology (01_AC02). Another lecturer in the Bio-Medical Technology department and programme, agreed that the throughput rate is high – in the region of 80%. However, pass rates differ from module to module or subject to subject in the science faculty.

Another lecturer in the same module, but at a different level in Environmental Health, concurred with her colleague that:

*90% of our students graduate on time although students often face the challenge of placement of the work integrated learning [WIL]. However, students who are absorbed and gain work experience qualified as environmental practitioners (01_AC07).*

These students are also in smaller classes and are exposed to the practical knowledge associated with the requirements of the qualification programme. Moreover, they are motivated by the knowledge of secure employment once they graduate and attain success:

*At the end, you will be graduating and transferring the knowledge further or facilitating the knowledge and assist people who are often exposed to gangsterism* (01_HS04).

It does however beg the question: why are requirements for the humanities faculty not increased, and why is enrolment not capped in the same way, if it appears to be enabling success?

### Institutional and faculty level interventions at CUT

While motivation to be employed, entry requirements and enrolment impact on student success at CUT, they are not the only factors. CUT has established student support services which further explains student success at the institution. The range of programmes offered to students includes academic support (including supplementary instruction and student-peer mentorship), student counselling and health/wellness services; and support to student governance structures at both institutional level and in the faculties (CUT, 2016). The interventions and pedagogical strategies are expected to mitigate the effect of or deal with academic challenges brought about because of the transition from school to university.

These programmes could contribute to why some students experienced a welcoming environment at university. A student from FHES (01_HS04) appreciates the benefits gained from the university environment. The university is creating:

> *a positive environment in the sense that it pulls us together with a common goal that you must achieve and there is a lot that you are taught there and you are able to apply it* (01_HS04).

A BEd Commerce student from FH also portrayed a welcoming university environment.

> *I feel at home because the staff are very friendly and the rules that they have set for the students are the best* (01_HS08).

An administrator in the FHES addressed the issue of belonging, underlying the fact that as administrators, one of their responsibilities is to give students a sense of belonging and comfort in the faculty. This includes supporting and guiding them where there is a need, such as facilities management. The administrator further indicated that their role is also to ensure that the venues are always in good order and that the teaching and learning technology is working properly in the lecture rooms (01_AD04). Such actions are not necessarily scripted into the formal programme submitted to the CHE and SAQA for approval and accreditation. These acts of ensuring belonging and comfort for students are, however, paramount in enabling students' continued participation in academic activities and eventual success.

### Peer mentorship programme

The aim of the Peer Mentorship Programme is to provide CUT students with a supportive environment that will motivate and assist them in developing and reaching their maximum personal and academic potential. This programme provides a framework for positive interaction between students, mentors and lecturing staff. More importantly, trained peer-mentors provide leadership and support to students during mentoring sessions designed to help connect learners, provide them with information on campus resources, and give them a sense of belonging and open possibilities of connectedness to the world.

In particular, peer assistance and peer mentoring where another student assists has, according to one academic, been effective because students in a one-to-one situation sometimes talk the same language rather than English (01_AC05):

> *So, ever since then, whenever I face a problem, I'll go to him [a peer mentor]. If I don't understand in the lecture hall, I would just go to him privately and talk to him like, I did not understand this and that. So, he's the one who showed me a good impression of Maths* (01_HS08).

Peer-mentoring, where students are supported by their peers using their mother tongue if necessary, is critical to bridge the gap between the language used at home and English as the medium of instruction at university. Thus, peer-mentoring provides a safe environment for students who require additional reassurance with the formal curriculum. The use of the student's home language to decode formal content and threshold concepts, goes a long way to mediate epistemic access to students whose home language is not English. Peer-mentor students trained to work with their fellow peers can discuss content in the students' home language.

### Special programmes

Academics in the FHES pointed out that they have organised tutorial classes and WhatsApp groups in their different courses to support students not only to remain in the system but also to help them succeed (01_AC03, 01_AC04). In addition, various special support programmes and strategies are implemented to ensure that students remain in the system and succeed according to an administrator

in the FHES. These special projects are not organised at institutional level but rather at faculty / departmental levels. Apparently, these special programmes have been developed over and above the normal contact time between lecturers and students and seem to apply to certain courses. For example, a Mathematics special programme has been developed to safeguard student retention (01_AD04). The latter pointed out that:

> *retention of students is important because we built an enabling environment to keep our students in the system and by so doing increase throughput and completion studies within the stipulated qualification minimum period* (01_AD01).

An enabling environment complements efforts by institutions in supporting students to gain epistemic access given the often-unwelcoming university environment to some students from marginalised communities.

Contrary to positive views by academics and administration staff, one student from National Diploma in the FHES indicated that she had psychological and social problems but did not make use of the services provided by the university (01_SS14). The majority of the students indicated that they had not experienced such psychological and social challenges. However, it could be that more students experienced both psychological and social problems but shun these services to avoid being stigmatised by their peers.

## Conclusion

Students from marginalised communities enrol at CUT and complete their academic qualifications programmes. The reasons for their success at CUT described in this chapter are multi-dimensional. In the first instance, enrolment is a feature of the geographical proximity of CUT to their homes. While the study did not attempt to examine, statistically, how far students' homes are from CUT, student narratives provide evidence that the proximity aided their access. In addition, students report relative privilege within disadvantaged spaces and have received financial contributions from the state, in the form of NSFAS grants. Economic disadvantage is thus not a blunt variable when explaining student success at higher education.

Regarding the intersection of the official and pedagogic domains, the chapter demonstrates how the difference in success at science and humanities faculties could be explained via a combination of students being motivated by the prospect of employment, higher entry requirements that are presumably complied with as well as smaller enrolment numbers. This begged the question of why the humanities faculty did not operate on the same basis. Lastly the chapter discusses efforts on the part of the institution that could be creating additional conditions explaining student success at CUT. These include the peer mentorship programme and special programmes to support students. Student success at CUT is thus not a uni-dimensional event but the conglomeration of processes that culminate in allowing students to firstly enrol at an institution of higher education and then proceed to complete their qualifications.

# Chapter 5

## Student Epistemic Access and Success at a Comprehensive University: The Case of the University of Johannesburg

### Introduction

Like Cross and Atinde's (2015) finding, historically disadvantaged students at UJ do possess compensatory capital that facilitates success, including resilience, determination, self-efficacy, self-reliance, ownership, flexibility and adaptability. Compensatory capital is the presence of a critical attitude (awareness and critical appraisal) despite the absence of economic and social capital. In other words, the self-awareness, responsibility, and resilience compensate for the lack or sparsity of economic and social capital.

This case study raises caveats for Bourdieu's (1984, 2005) social reproduction prediction where economic capital is depicted as the root of all other capitals. According to this prediction, working-class students are at a much higher risk of not completing their degrees than middle-class students (Van Zyl, 2013). A large body of research shows an association between socio-economic status and success (Van Zyl, 2016), due to both academic and psychosocial factors (Van Breda, 2017). However, there are students from this social background who excel despite the odds. The UJ study attests to well documented challenges faced by disadvantaged students, including lack of adequate access to finance, family circumstances (Van Breda, 2017), difficulties in 'fitting in' or the ability to make needed social links (Thiele, Pope, Singleton, Snape, & Stanistreet , 2017; Van Zyl, 2016), lack of academic guidance, academic or social support from home, unconducive academic practices (e.g., time spent on task) (Van Zyl, 2013). In addition, Cross and Atinde (2015) also outline challenges, such as language competence which impacts negatively on 'developing conceptual confidence; 'spoon-fed' schooling experience at odds with higher education institution (HEI)'s expectation for self-regulation and greater freedom; university environment often embodies explicit and implicit norms that are unfamiliar to these students; limited exposure to information and communications technology (ICT) which are central to university learning; and the stigma associated with their socio-economic background.

Data suggest that compensatory capital largely arises from the students' upbringing, but the universities can further and deliberately provide opportunities to cultivate it. However, providing opportunities does not necessarily translate into uptake of such opportunities, as the uneven and suboptimal utilisation of various academic development support at UJ attests. Similarly, the reported overwhelming positive student experience at UJ does not seem to automatically translate to a high throughput rate. This case study is founded upon a metaphor of 'it takes the whole village to ensure epistemic access and success', with the main objective of exploring diverse factors that account for the positive student experiences and the undercurrents underscoring a holistic model for attaining academic access and success. In this regard a wide range of issues are at stake, and they include individual motivation and drivers of capability including know-how and collective agency, which sometimes assists and sometimes drives students to learn (Maniram & Maistry, 2018) – and know-thyself, which in turn drives functioning (experience). In this chain of factors, both institutional and individual agency are crucial (Sen, 1992; Walker, 2018). While the institution directly impacts campus culture (including institutional changes) and offering of academic and social services, individual agencies, including self-awareness and open-mindedness are also central to translate any institutional offering into individual experience and success. Thus, this case study adopts Sen's differentiation of capabilities and functioning discussed in Chapter 2. Adopting this framework means that this analysis first reports functioning (student experience), then investigates capabilities that might have contributed to the functioning. In addition to pinpointing the capabilities themselves, this report interrogates what might have given rise to the capabilities.

Like the famous African proverb that 'it takes a village to raise a child', this case study suggests that it also takes a whole village to ensure student

success, particularly for historically disadvantaged students. It points then to the responsibility of the institution to nurture student capabilities. The institution is where the individual student intersects to as the central node of the village which will ensure epistemic access and success. Likewise, it is important to consider both academic and social aspects of a student's life and success. This study distils the following three aspects regarding 'the whole village' metaphor. First, there is a need for a wide range of stakeholders to work together, take an extra step and meet the others halfway. It includes the students themselves, their homes and community, UJ's lecturers, tutors, administration and support staff, as well as fellow students.

The second relates to a temporal dimension which highlight student background factors in facilitating academic success. Social, economic, technological, and psychological challenges based on their experience at UJ also play a part; and know-how, know-thyself, collective agency and motivation. Students repeatedly draw on habits or lessons from earlier life to account for their resilience. However, UJ clearly has further developed some of the facilitating factors. Neither background nor UJ can claim full credit (or be blamed) for where a student is at today. Another example is those stigmas that could further widen the articulation gap. Although often not pointed out in articulation gap literature, this case study suggests that students' perception of language and counselling could be part of their cultural baggage they bring to the universities. The metaphorical dimension can further be broadened to include not just physical space and stakeholders, but also experience in different times, with the temporal dimension being seen in terms of the most critical first six months/year of a student's journey and chances of overall success. After passing the modules for the first semester, a sense of achievement and greater confidence usually emerges and often serves as a booster that triggers the virtuous loop for retention for later years.

The third aspect refers to the goal of tertiary education. Academics and education clearly remain crucial in terms of what universities offer. However, the university experience is not only about academics. An empty stomach cannot concentrate on studying. Knowing that one owes fees, demotivates the students. A fuller and rounded experience with other social engagements enriches students' university experience. This is particularly important in the contemporary world with greater and faster technological breakthroughs and disruptions. In this sense, developing a student's all-round abilities might have greater impact on epistemic access and success than a narrow focus on providing support to their academic work.

The Writing Centre Officer summarises this notion of the whole village well: *We are all sort of linked like a chain … your [student] failure is not just your failure, it's a failure for your tutors, it's a failure for your lecturers, it's a failure for your Department, a failure for the faculty and a failure for UJ … we are making it one person's problem when it comes to failing, but it is a collective failure, actually. So, I am saying that all these people should work together… Epistemic access, knowledge access is with all of us.*

Noteworthy, however, that while a village makes one person, individuals also make the village. A person is more than a mere passive product of the village, but through individual agency can actively interpret and interact with the surroundings. This process calls the spirit of ubuntu to mind: '*I am what I am because of who we all are*'.

**Background: The UJ Context**

UJ emerged as a unified entity in 2005 as a result of a merger of three distinct institutions (RAU, the Technikon Witwatersrand and the Soweto and East Rand campuses of Vista University) and sought to reinvent itself. This integration has come to represent the backbone of UJ's diversity and inclusiveness as the institution seeks to distinguish itself as a new, adaptable and progressive institution. As a symbol to depart from the past, UJ rejects coats of arms – a custom for other tertiary education institutions in SA – and adopts a logo and brand identity instead. To celebrate diversity, UJ hosts diversity week and a diversity day in September. Two of UJ's strategic thrusts relevant to this study are *Excellence in Teaching and Learning and Enriching Student-Friendly Learning and Living Experience*. To achieve these strategic thrusts, the Vice-Chancellor's Award for Teacher Excellence is awarded each year. UJ is at the forefront of South Africa's 4IR initiatives. In 2017, fully online degree courses in various faculties started at UJ with blended modules being fully implemented in all faculties.

UJ has eight faculties (Art, Design and Architecture; College of Business and Economics; Education; Engineering and the Built Environment; Health Sciences; Humanities; Law; Science) spread over four campuses. UJ Higher Education Data Analyser data shows that in 2021, its annual first-year intake was 14 131, an increase from about 10 000 students in earlier years (Van Zyl, 2013). UJ's undergraduate headcount to permanent staff ratio is 38:1, higher than any of the traditional universities. According to UJ's Undergraduate Experience Survey (UGES), some 94% of the UJ undergraduate population are South African nationals. About 3% self-report a disability of some kind. The racial profile overall has seen a dramatic increase of the African population over the years (from 59.3% in 2007 to 86.7% in 2019) with females constituting about 55%-60% (increasing over the years). Bachelor three-year degrees consistently count for about 35% to 42% of the total UJ undergraduate student population.

The proportion of historically disadvantaged students at UJ is high. More than half the students at UJ are the first persons in the family to attend university and an additional 30% has one or more siblings who have attended university. The percentage of students not having enough to eat also remains worryingly high.

### Learning about and learning to be

In this case study, the concepts of *Learning about*, and *Learning to be* are explored and contribute to the analysis. *Learning about*, involves learning of facts, concepts and procedures, is not sufficient for developing effective ways of 'seeing'. *Learning to be* requires learning of the practices of the knowledge domain (discipline or profession), which includes the principles, dispositions, attributes, competencies, activities, skills, procedures and values of the knowledge domain (Amory, Gravett, & Van der Westhuizen 2008, p.3). This explanation suggests the similarity between learning about and know-that, as well as between learning to be and know-how. However, it also hints at an additional emphasis from learning to be that stresses learners' identity. Gravett (2012) explains this further: With his 'learning to be' notion, Bruner stresses that learning should also be understood concerning the development of a social identity. 'Learning to be' is about "developing the disposition, demeanour and outlook ('the eye') of a competent practitioner (Gravett, 2012, p.5). Know-how is the epistemic capacity to know-that (Ryle, 1945), especially self-regulated abilities to achieve know-that (Elzinga, 2021). Unlike Brenner's (2015) assertion that historically disadvantaged students often wrongly place too much emphasis on know-what, at the expense of know-how, ample evidence of know-how is detected in this study. However, know-how is not only how to do things oneself, but also about collaborative know-how: knowing how to be resourceful, when, where and whom to ask for help (Simonin, 1997). "Capabilities are realised relationally and socially" (Walker, 2018, p.562). It is from the foregoing that this framework is used to categorise the different capacities identified in this study.

### Methodological overview

This case study follows a methodology tailored for a large project and uses the UGES, involving around 8,000 undergraduate students since 2015. Ethics clearance and permissions were obtained to access UJ's data. The study compares high and low throughput departments by collecting dropout and graduation data from 2016 and 2017. Specific departments were chosen within faculties based on their throughput rates. The study mainly focuses on students who reached their final year. Excel sheets were created based on gender and school background. Academic staff interviews were challenging due to Covid-19 and were conducted through student referrals. Administrative and support staff were contacted through department heads. Overall, 27 participants, including 16 students, 3 academics, 4 administrative, and 4 support staff, were interviewed online. The study emphasises student experiences, using direct quotes mainly from students, identified by their faculty codes: HS for humanities and SS for science.

### Journeying through UJ: Context, preparedness, expectations and aspirations before university

Student preparedness is related to student background, context and the articulation gap. As many underprivileged students grow up in villages, informal settlements or townships, or small towns, often far from the big metropolitan area in which UJ is based, their experience during their upbringing directly impacts their preparedness including financial, social, emotional and academic state of readiness.

Financial constraints remain one of the main challenges during the lives of many of these students, where their families often relied on child grants, social grants, pensions or single income, like many others in their community. Many have not had reliable electricity at home. Regular and reliable access to the internet was even less common. A few even grew up in more difficult situations, such as domestic abuse (03_HS13). Good academic support systems from their immediate families were often lacking. In addition, as attested by a Centre for Psychological Services and Career Development (PsyCaD) Officer, many of these students take on a larger number of responsibilities at home: many are expected to look after the siblings; sometimes sending what they have from NSFAS or any other income back home. Reduced funds impact students' ability to have sufficient funds for transport, food and other necessities, with potential deleterious effects on their academic activities as discussed later.

Most students, however, recalled a broad conviction from an early age, often reinforced by their family and teachers that "education is what you need to succeed" (03_SS08). A perceived link between (tertiary) education and a better job/life, as well as a sense that graduation would change one's future is evident. This link is often an important motivation for the students to study hard and do well, e.g., passing or obtaining good marks. Therefore, it comes as no surprise that a fair number of students want to get a good job after the completion of their degree, to be able to *afford the lifestyle…provide for your family* (03_SS04). HS01 *unapologetically claimed: I cannot…prize academia over financial livelihood… Only once the career is established, I can begin to think about pursuing post-grad*.

The majority of students interviewed attended public schools. While some high schools had computers, most others lacked basic learning materials like textbooks or science laboratories. Exposure and access to technology were wanting. Many only learned how to use a computer when they got to UJ. Many were not prepared for the degree of self-study and workload expected at university level. Except for a few, the majority of students we interviewed expected university life to be as easy as at high school, *'roses and strawberries – strolling through university life at ease'* (03_HS09), *'a fun place… partying and all that'* (03_HS14). Much of this expectation was from television (TV) movies and from others, possibly constituting another dimension of the articulation gap. One student recalls a shock of witnessing freedom being expressed by peers when they argued; *'when I went there [UJ], some were smoking, some were drinking… I was expecting something strict as in high school. They don't allow you to smoke, they don't allow you to drink'* (03_HS02).

**Functioning at UJ: academics, opportunities and experiences of campus culture and environment**

It is important to note that for most students, city life and having to deal with the university obligations was an overwhelming experience. This was mainly because most students came from closely-knit and homogenous communities where people knew each other and related closely. One change at UJ is the variety and diversity of people they meet as reflected by one sciences student who argued that Johannesburg is an *'ocean of everything and almost everyone is here'* (03_SS10). Most students were thus simply overwhelmed by a sense of overstimulation and confusion during their first few months. In some instances, language was indicated as a challenge. For instance, for students who attended high schools that primarily used an African home language, understanding and expressing themselves in English (medium of instruction at UJ) became difficult. Some of these students indicated that sometimes the lecturer spoke too fast; while others spoke with an unfamiliar accent or dialect. Besides language, some students have never been exposed to lecturers of a different skin colour as revealed by one participant, a science lecturer.

Campus atmosphere, support, and student experiences significantly influence outcomes (Badat, 2010; Soudien *et al.*, 2008; Strange & Banning, 2015). Students' sense of belonging and support are key factors affecting their performance. While safety perceptions are generally high (over 80% feel safe on campus), on-campus residence shortages have led to students seeking off-campus accommodations. Statistics show slightly higher success rates for on-campus students compared to those in off-campus accommodations (87% versus 83% in 2019). Challenges like noise and transportation affect off-campus students' attendance. Social activities play a role in networking and relaxation, although actual participation rates in sports and cultural events hover around 20% to 33%. Political activism at UJ is less pronounced than on other campuses, such as Wits. Overall, the campus environment significantly shapes students' academic journeys.

One worrying observation, however, is students' suboptimal use of support services and awareness of information, for example, funding resources. Although a few mentioned the assistance from organisations like the Economic Freedom Fighters (EFF) and South African Students Congress (SASCO), few students specifically discussed the Students Representative Council's (SRC) role in their experience (which the staff members claimed to be instrumental in assisting historically disadvantaged students). A few students have a positive view about the EFF, claiming them to be helpful with registration and attending to their needs including fighting for allowances as well as providing a voice to filing complaints and bridging the gap among diverse student classes as quoted in some responses; '*quickly respond to students' needs… they fight for us for our allowance* (03_SS13), *they provide us with a voice to file our complaints… they make a bridge between the upper class or the big guys from the university and us as students* (03_SS10). SASCO tended to be complimented less than the EFF. Overall, while all support functions are presented and explained to the students during the First-year Seminar (FYS), no students specifically mentioned FYS in terms of helping them access the information they needed. One reason might be that not all students attend FYS. Another possible reason as alluded to by a science administrator could be that of information overload during the FYS week. This is the period of initial transition and adaptation.

### Institutional changes and influence on academic success – 4IR Technologies, decolonisation and the Covid-19 pandemic

The institutional change also impacts students' experience and success (London, Downey, & Mace, 2007). When asked to recount changes encountered after starting at UJ, however, few specific changes were mentioned except those brought about by Covid-19. It was generally reported that during Covid-19, UJ quickly moved to online teaching with staff reporting that '*the circumstances of Covid-19 almost forced everybody to buy into 4IR and how it could help*' (Writing Centre Officer). However, some found teaching and learning during Covid-19 more difficult while others were thrilled that '*online learning became quite better than being in class* (03_SS04)'. Few interviewees, both students and staff members, directly discussed the implication of any changes (except that of Covid-19) in relation to academic performance or throughput. There is also evidence that awareness and understanding of some concepts (for example, 4IR and decolonisation) are greater than others (for example, 21st-century skills).

When specifically asked about decolonisation and 4IR, many interviewees acknowledged that they have heard about the terms and that they *expand my knowledge… encouraged me to think beyond* (03_HS13), but often their understanding tends to be broad and generic. Student interviewees showed limited understanding of these concepts, such as associating curriculum decolonisation with moving curriculum online or 4IR with student control, something surprising given UJ's mission to position itself as a modern African city university, which is cosmopolitan in character, and asserts academic freedom in the liberal, progressive and transformative values it espouses (Barnard & van der Merwe, 2014, p.312). Several lecturers (both from science and humanities faculties) indicated that many students (sometimes including themselves) do not know what these terms meant when they used them. Science students generally talked more about 4IR while humanities students spoke more about decolonisation. Topics typically discussed when interviewees discussed decolonisation included: workplace relevance, more black students entering university, fair treatment, or renaming residences. Some also associated it with a broader social movement towards equality or broad social changes, *economic freedom for those who were oppressed by the colonisation* (03_HS14), *the mindset and the structures and culture of colonial pressures or colonial things* (03_HS03), *Africans learn to do things for ourselves* (03_SS07), and *learn about our own cultures and see the value of it* (03_HS10). What remains to be seen in this study is that whatever changes took place, be it Covid-19 related, 4IR related 21st century technologies related, brought contrasting impacts and sentiments among participants be it students or staff. This implies that a combination of opportunities and challenges were experienced.

### Academic experience at UJ: Experiences on the curriculum and academic support

University life revolves around academic experiences for students, particularly in the science faculty at UJ, where the workload is described as intense, fostering a serious studying atmosphere. Students generally perceive their lecturers as welcoming, considerate, and passionately dedicated to their roles, creating a smooth interaction. According to UGES statistics, around 60% of students feel that their lecturers care about them personally, while aspects such as earning respect, generating excitement about learning, being helpful, approachable, and well-prepared for lectures exceed 80% approval. The curriculum, highly valued by most majors, is considered informative, stimulating, and relevant to the workplace. A significant 93% to 94% of students agree that relevant examples are used in classes, motivating attendance rates of approximately 55% to 67% attending all lectures and 30% to 38% attending more than half. Some students express genuine enthusiasm

for attending classes, with a few having never missed a lecture. Participation in class was another important factor although confidence seemed to follow seniority thus remaining at about 56% to 61% (UGES, 2016-2019)[13].

Another aspect raised during interviews in relation to the curriculum is language, especially the initiatives in different faculties particularly humanities to embrace the home language of learners. For example, an experimental programme that started in 2019 in the Faculty of Humanities involved using home language in some classes. In addition to class participation in their home language, *students can also write in any South African language because they would try to provide tutors that could also understand their language* (humanities lecturer). Not all students use these opportunities. One lecturer observed that some *think it's [using home language] not cool. Maybe because of stigma from high school*. In science, an online course for mathematics ('language of science') has been developed. In addition, the science faculty has *created a mathematics learning centre that is open to students…where they can go walk into a group of tutors* (science lecturer). While one humanities lecturer associated some curriculum changes with the 21st century in terms of a need for diverse exposures, curriculum relevance was said to be even more complicated in science as *there are certain concepts that simply cannot be changed and there's curriculum that must remain* fixed a sentiment echoed by one participant, a science lecturer.

The second key aspect of academic experience besides experiences of the curriculum, related to the academic support. As argued in the works of Kuh *et al.*, (2011) this emerged as critical towards bridging the articulation gap for student success. At UJ, the Academic Development Centre (ADC) has, since 2017, become more systematic and institutionalised through Institutional Student Success Initiative (ISSI), thus playing a crucial role in coordinating academic support. An ADC officer indicated how academic support has been anchored upon various structures such as the *sub-committee of Senate Teaching and Learning Committee [through student success committee] with each faculty also having a Vice-Dean in Teaching and Learning*. They also have a data analysis unit, established within the ADC to provide data support embracing data-informed decision-making. The centre implements support services that comprise the First Year Experience (FYE) (a combination of curricular and co-curricular activities to assist transition into university life implemented since 2015) and Senior-year experience. The Priority Modules Index (PMI), developed around 2009, provides a list of the lowest throughput modules in a faculty. This provides faculties with a tool that can be used to develop further interventions. As part of its support initiatives, ADC works in close liaison with faculties in developing and implementing interventions on modules.

Other essential support initiatives for enhancing student academic life include the library services whose monthly usage by students is high at over 75% while overall satisfaction with the library's service is equally high and consistent at about 91%. Another key form of support involved access to laptops or the internet which has consistently improved from just above 60% in 2016 to 85% in 2019. Laboratory usage trails slightly below that for the library, with 70% to 75% of students using the facilities more than once a month. Another important part of academic support at UJ comprises of the Writing Centres available in each of UJ's four campuses. However, usage of the Writing Centre is not optimal as more than 60% of students have never used it, although this figure is slowly declining (63% in 2016 & 60.5% in 2019). However, those who have used the service were all satisfied. Tutors and tutorials are a support mechanism which reportedly 70% to 75% of students accessing more than once a month. Tutorials were viewed as effective due to their being much smaller than the classes whilst students expressed confidence with participating as they could relate to the conversations.

An important platform for emotional support at UJ is PsyCaD, which is available on all four UJ campuses and works closely (often through referrals) with faculties, ADC, Campus Clinic, and residence. A PsyCaD official indicated that PsyCaD *assists students adjust to the university personally, while helping them develop self-esteem and also managing their time and pressure especially if they lack motivation*. Staff members however noted that one challenge in utilising PsyCaD is that perceived stigma might discourage students from accessing the services or accepting any therapy or medication prescribed. This low usage is reflected in the UGES statistics, especially compared to the use of other support, where close to 80% have never used PsyCaD. Other participants particularly administrative staff at PsyCaD or in other units revealed that often, students use support *in desperation and often at times when it is too late* (ID). It is, however, worth noting that among the students interviewed, usage of

13 Unless specified otherwise, the institutional figures in this report are reconstructed from UGES. UGES's original data set is reported annually. This report aggregates data from 2016, 2017, 2018, 2019 reports.

PsyCaD was viewed in a positive light while many recalled good experiences interacting with the unit.

**An overview on some practices drawn upon for enhancing student agency and capabilities**

Generally, students tended to draw from a multiplicity of experiences and know-how to deal with their obligations at university. The obligations go beyond the academic aspects as they also include means of adjusting to the off-campus and on-campus environment which tends to inevitably influence their academic access and success. An integral issue of student survival related to collective interdependency that can be equated to Ubuntu which saw them drawing from togetherness or teamwork in dealing with academic and non-academic issues. As argued by Masehela (2016) and Wright (2020), Ubuntu an important African phrase referring to collective disposition and interdependency, has been invoked in many studies of African student success. In this case, without any prompting, many students who were interviewed pointed to solidarity, most of which were linked to their upbringing, with phrases being commonly evoked that include '*stay together and make sure that everyone was okay*' (03_SS12), '*through everything, we are always together*' (03_HS14). Related notions included compassion, sharing and helping each other (you can't be your own person), (03_SS08); *you can't know it all; we are one* (03_SS10); *being in a team is better than doing something alone,* (03_SS12) and respect (*never look down on people)*, (03_SS06); *I don't judge people the first day, I don't judge people at all,* (03_HS03). During Covid-19, students reported reaching out more to classmates or study buddies to help.

Important aspects forming part of student's capabilities include individual know-how (both in life skills such as managing finances, self-discipline, ownership, determination, persistence and carefully following one's schedule) and taking up the initiative whilst also acting responsibly and timeously without any dispute in the study. Translating into practice, from students' responses, working hard often means drawing from key tactics including *study[ing] every day* (03_SS17) and being organised and effective with time management, *always on top of your work* (03_SS04); *once you fall behind it is going to be very difficult to catch up* (03_HS10). The study strategy of using a schedule tended to be more common among science students something also confirmed by Jacobs and Pretorius (2014) who argue that it is probably because it is entrenched in their FYS.

It is essential to highlight the influence of financial management skills on student's capabilities especially how students tend to adjust towards acting responsibly despite earlier indications of irresponsibility among some. Just as suggested by literature, that finance is a main challenge for epistemic access for historically disadvantaged students (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006).), there are indications of poor financial skills (how to manage finance) in students' responses. Along similar lines, the NSFAS recently introduced offering of cash instead of channelling it for different categories, which places additional responsibility on the students for financial management skills. Although some students interviewed indicated having misused their finances sometimes, one science administrator observed that in many instances that relates to students struggling to manage the transition, although she added that sometimes this challenge is not necessarily a result of poor financial management skills, but extended obligations result in the money being shared with the student's family. Paradoxically, however, *living beyond their means* (03_SS05) tends to apply to students not dependent on NSFAS, as all participants claimed managing NSFAS funds well.

Other essential aspects that form the foundation for capabilities of many historically disadvantaged students as highlighted by Soares & Soares (1970) is the tendency to have a heightened sense of self and maturity. Self-awareness is often the basis of this heightened sense of self, but it also often includes self-awareness and acceptance, open-mindedness and adaptability, critical attitude, ownership and independence, determination and persistence, self-discipline, gratitude, confidence (Cross & Atinde, 2015), as our student interviewees reported. Self-awareness was demonstrated as awareness of difference, awareness of background, family and surroundings. Interviewees also showed a sense of self-acceptance. The majority claimed that *background is a background, you don't need to defend it, you don't need to make it better* (03_HS03), *there is nothing wrong with me being different because that is how things are and me being different does not mean that I don't belong* (03_SS03). Some learned to be more social and interact with others during their tenure at UJ, sometimes 'forced' by some courses (speak out or work with others). They adjusted and adapted when they needed to or considered fit, sometimes led to *doing things that I didn't think I will do, things that I didn't think I was capable of doing… keeping my mind open has allowed me to go, has allowed me to experience more than I thought I would* (03_HS01). A high level of critical self-reflection was thus highlighted by most participants across the two faculties. Importantly, interviewees showed a sense of appreciation to their limits and drawing from this to avoid exerting pressure on themselves whilst others emphasised the need for balancing interdependence with independence. In this regard, participants reflected on themselves with a drive of appreciating and maintaining one's identity and being conscious of unconducive

aspects related to their surroundings and upbringing and how they can draw from these to enhance their positivity, self-confidence towards their academic success. UGES statistics confirm a generally high level of self-confidence (about 80% to 75%, although a slight decline has been discernible over the years).

### Recommendations

Several recommendations are proposed towards making UJ an optimally functioning university.

### On Curriculum

The case study proposes revisiting the content that lecturers cover through broader discussions within the university family and beyond.

Addressing language-in-education policy challenges faced by students from disadvantaged backgrounds, through appointing and promoting more African and multilingual scholars as part of the curriculum decolonisation process.

### Student funding

UJ can do more towards ensuring accessibility of information on various funding opportunities, beyond NSFAS.

### Academic support

Implementing rigorous awareness campaigns on the various support services available to students (particularly Writing Centres, PsyCaD and food banks among others).

UJ should explore more innovative ways to retain students for the first six months through strengthening mechanisms for acclimatisation to university culture through social and other media platforms.

Using emerging technologies especially complimenting the FYS. Speeding up data-informed PMI or other artificial intelligent (AI)-aided student information data mining, for academic support whilst also drawing from the same and other initiatives to support innovation around critical pedagogies for enhancing student success.

### Conclusion

There are two main findings from this case study. One relates to the relationship between student experience and throughput, another is the importance of a collective effort to achieve student success for historically disadvantaged students.

When it comes to student experience and throughput, what is surprising is a lack of discernible difference in terms of the student experience at UJ after specific separation and analysis of data from high and low throughput departments or the two faculties. Successful students in both faculties were however interviewed. This suggests that students who succeed have similar experiences irrespective of the relative performance of the faculty.

A disaggregated analysis of throughput in terms of gender and high school locations shows that differences clearly exist, such as the

different happy or angry/frustrating moments when interviewees were asked to recall. Cross-comparison in terms of perceptions/experience at UJ and demographic characteristics result in limited categorical differences. For example, those from rural areas do not necessarily find the transition to a university more difficult than those from urban areas (mainly township); females or those from rural areas do not necessarily report lesser confidence or claimed to be introvert; extroverts do not necessarily find socialisation into the new environment easier. Instead, the main notable difference is only found in terms of one's accommodation status where off-campus students report significantly greater encounters of crime-related events and lesser participation in activities (especially social), often due to transport challenges.

Another puzzle from the data is an overwhelming positive 'assessment' of interviewees' experience at UJ, found from different data sources such as from students, academics, administration and support staff; interviews as well as quantitative surveys collected over the years, which does not correlate with throughput rate. Positive reporting merely due to social desirability bias is likely to use more conservative words rather than *amazing* (many interviewees), *brilliant* (science administrator), *I love everything about the place* (SS04). *UJ is very up there…when a student comes, it's like they come to a family away from their own personal families* (finance officer), *already close to being ideal* (humanities administrator).

*Exploring additional reasons for students' positive experience suggests the following:*

These students are all under NSFAS and have indicated their appreciation toward the opportunities they were given, and the achievements thus far. So, their perspectives might be coloured by their own appreciative and humble outlook. Having successfully progressed to the final year, these students are all survivors of the system. Therefore, their experience reflects a skewed 'winners' bias which might be qualitatively different from those who were unsuccessful and dropped out of the system.

Department grouping used to sample high- and low-throughput departments are not particularly useful in differentiating throughput. Further investigation of student majors and subjects indicate that all students are exposed to a wide range of subjects and, therefore, a variety of academic experiences. As students interact with a wide range of curricula and lecturers, their experience is bound to show a variety of encounters and therefore greater chances for positive encounters.

Lastly, experience, opportunities, support and throughput are correlated, but not in a linear fashion. Instead, throughput is an efficiency term while experience incorporates a much greater affective dimension. A science administrator and lecturer pointed to one factor that might be important to consider: throughput for the service modules the faculty offers to other faculties generally have lower throughput. These might not directly relate to experience, but impact throughput, nonetheless. This suggests that factors typically investigated to understand throughput, such as institutional culture, socio-cultural background and capital, and student experience, are necessary but insufficient factors. Instead, meso- and macro-level structural challenges, such as 'high-risk' modules or priority qualifications, which cannot be directly resolved by 'optimising' micro-level student experience, could be crucial in the examination of throughput.

# Chapter 6

# Student Epistemic Access and Success at a Historically White University: The Case of the University of Pretoria

### Introduction

This case study looks at a historically white Afrikaans-medium university and how students with fewer resources use their own abilities and support from the university to succeed in their studies. The focus is on how the university has changed in the last ten years regarding its culture, language rules, and including students of all races. The study uses a "capability approach", discussed in Chapter 2, to understand what helps these disadvantaged students to do well, or what prevents them from doing well.

### Demographic transformation

UP is a research-intensive university with 53 972 students registered across nine faculties. In 2022, the Faculty of Humanities had a total headcount of 5 933 students, while the Faculty of Natural and Agricultural Sciences (NAS) had 6 319 students. African, Coloured, and Indian students made up 67.2% of the student body at UP, while white students constituted 32.6%. In 2021, African students represented 69% of the 6,324 residence placements at the university. At the Mamelodi satellite campus, which offers extended degree programmes, black student enrolments accounted for 79.7% of total undergraduate student enrolments. In 2021, the university's staff demographic included 26% black permanent staff members and 30% black temporary staff members, which constituted 56% of the total staff complement. A comparative analysis of module pass rates by race for the 2015-2021 undergraduate cohort shows that in 2021, the lowest module pass rate was for African students in NAS, with a pass rate of 67.9%, while the highest pass rate in 2021 was for Indian students in humanities at 94.2%. It was interesting to note that for the 2015-2021 cohort, the lowest throughput rates in NAS by the sixth year of study (2020) were for African students (45%), compared to 71% for white students. In the Humanities, the lowest throughput rate was for Coloured students (66%) in 2020, and the highest rate was obtained by Indian students at 80%.

These figures offer a snapshot of student performance at Faculties of NAS and Humanities, and some insight into performance according to race grouping. Student performance, however, is an incomplete measure of student success, which is why this project includes staff and student experiences of higher education.

### Interventions for student success

The university supports student success through various strategies: Faculty Student Advisors (FSA) guide students academically and emotionally. The South African Student Survey of Engagement survey is administered every two years by the University's Higher Education Unit to track engagement, while the Student Academic Readiness Survey identifies social support[18] needs for first year new entrants. A satellite campus, established in 1981, offers four-year BSc and BCom extended programmes for students needing more time to adjust. Geared toward disadvantaged backgrounds, it focuses on bridging programs and after-school initiatives. Initiatives like Pre-University Academy (PUA) and winter/summer schools aid high school learners in transitioning to university. Mental health support includes a dedicated crisis hotline with South African Depression and Anxiety Group and a comprehensive study on student well-being. Peer counselling, mentorship programs, and on-campus counselling services are also available for undergraduate and postgraduate students. As the qualitative data reflect, Faculty Student Advisors across campuses offer services like career guidance, module change advice, and student skill development. Tutorials are mainly for first- and second-year students in both faculties. The university's academic writing unit aids academic literacy across

faculties. Services such as psychosocial counselling, health support, and disability assistance are centrally available to all students, not tailored to specific faculties.

### Race and institutional culture and transformation

During the post-apartheid era, historically white, Afrikaans-medium universities have heavily prioritised transforming their institutional practices and cultures to ensure inclusivity for a diverse staff and student population (Le Roux, 2018; Van der Merwe & Reenen, 2016; Suransky & Van der Merwe, 2016). However, this transformation faces resistance and coexists with other institutional goals like improving graduation rates, modernising facilities, meeting enrolment demands, increasing financial aid, and sustaining research funding. The #FeesMustFall protests, reacting to the slow pace of change, highlighted the urgent need for institutional cultural transformation. While centred on fee-free education for underprivileged students, the protests also advocated for racially diverse academic staff, addressing campus racism, eliminating Afrikaans as a language of instruction, removing colonial and apartheid-related symbols, and combating gender-based violence (Luescher, 2016; Mahlangu, 2019). The appointment of the first black African Vice-Chancellor in 2019 responded to calls for decolonising higher education. The university launched public lectures on decolonisation and established a curriculum transformation framework emphasising social context, epistemological diversity, innovative pedagogy, and a culture of critical reflection (University of Pretoria, 2017). Additionally, the university's anti-discrimination Policy (UP, 2019) prohibits discrimination, hate speech, harassment, and violence based on diverse identity markers[14].

## Conceptual framework: cultivating capabilities for student access and success

The university faces challenges due to its diverse student body, drawn from different high school backgrounds in South Africa. This diversity creates hurdles for academic structures tailored to varying levels of preparedness. First-generation students, dealing with poverty, inequality, and trauma, encounter obstacles in accessing and making the most of higher education (Stebleton *et al.*, 2014; Ashwin & Case, 2018). Financial, social, and academic difficulties persist throughout their degrees, exacerbated by gaps in basic education (Andrews, 2015; Boughey & McKenna, 2016). This case study identified examples of resources, interventions and agency in the experiences of individual students and staff despite the challenges facing institutions and individuals. The student and staff interviews give evidence of individual and institutional agency in the face of significant systemic challenges (Van Breda, 2018). Vulnerable South African university students rely on community-based social resources and a commitment to education in response to the stressful transition to higher education.

## Methodology

Six datasets were used to compile this case study chapter, focusing on two faculties at the university: the Faculty of Humanities, and the Faculty of Natural and Agricultural Sciences. The first data set included faculty-specific data including available policy documents on the curriculum orientation, transformation and student demographics. The second dataset focused on progression and pass rates for the 2012-2017 student cohort across the two selected faculties. Data sets 3-5 involved data collection targeting diverse participants across the two faculties. For the three datasets, five postgraduate fieldworkers conducted the interviews between August and November 2020, after which transcription and thematic analysis were undertaken. The third dataset comprised semi-structured interviews with undergraduate students. Dataset 4 was semi-structured interviews with support and administrative staff while data set 5 semi-structured interviews with academic (lecturing) staff. In data set 6, faculty reports such as institutional surveys and studies were reviewed.[15]

## Limitations of the study

The data collection phase of the project coincided with the Covid-19 lockdown, which meant that most students and staff members were studying and working from home, thus posing challenges to participant recruitment and managing the appointments for online interviews. Other constraints were technology and data related. The challenges encountered by interviewers in this specific institutional context pointed to the need for context-specific training on interviewing skills.

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14 Race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language, and birth; or other comparable grounds including country of origin, HIV status, socio-economic status, albinism, gender identity, gender expression, intersex status, class, political opinion, year of study, physical appearance, body shape, mental health status, or occupation" (UP, 2019).

15 Details on numbers and criteria used for sampling are contained in Chapter 1 as they apply to all case studies.

### Analysis: Systemic and individual conversion factors that enable access and success

The following analysis is based on the qualitative interview data collected from staff and students, using the capability-informed concept of conversion factors. The analysis is split into two sections: the first focuses on positive or enabling conversion factors, that is, individual or institutional factors that enabled students to convert available resources and opportunities into achievements. The second section of the data analysis looks at the negative or constraining factors, which corrode students' freedom to convert available opportunities and resources into valued achievements.

As mapped out in the introduction, university students negotiate a network of historical, political, community, familial and institutional structures that compound their journey into and through higher education. The freedom to participate at university is more complex for students with precarious access to financial resources, even when students have access to bursaries, also noted in the UJ study. Finances remain a major obstacle to success in higher education (Kezar *et al.*, 2014) and achieving equal participation is more complicated for students with limited financial resources (Ashwin & Case, 2018). Bursaries do not always cover all the costs associated with university life, and poor students with unemployed relatives at home may share resources to help cover basic living costs. At the same time, students may compensate for limited financial resources by using prosocial strategies such as sharing resources, knowledge and skills (Landers, 2018). In response to these challenges, university support structures play a strategic role in supporting vulnerable students' efforts to succeed. These findings support the 'myth of formal access' narrative discussed in chapters 1 and 10. The first section of the analysis below illustrates examples of individual and institutional arrangements that enable access and success for historically marginalised university students.

### Capabilities for cultivating belonging to the university community

Across the student narratives, social connection emerged as a capability that enhances experiences of belonging to the university, and which students had reason to value. Being integrated as part of an academic community is a social resource that helped students mitigate stressors and challenges. Valued social support networks identified in the interviews were both formal (for example, an appointment with a faculty advisor or residence mentor) and informal (for example, a friendship with a more experienced peer).

An important aspect raised by student participants staying at university residences was the residence life that was viewed as an enabling part of their university experience. This could mean that there has been some transformation of residence culture, which has historically been particularly alienating for black students (CHE, 2010). Some students described the residence environment as a welcoming and supportive second home, due to an ethic of care embodied by peers and residence staff (Bozalek *et al.*, 2014). The capability set embodied in the interviews below includes a sense of belonging, access to caring adult mentors, a safe space to share challenges and problems and social connections with diverse students: *[Residence life] really helped me with my studies… it was just my second home, even the [residence] parents that we had, they were like my own parents. I can still tell them whatever, because I believe that my parents left me in their care and that I shouldn't suffer…it was a huge family tree, because we had international students, we were learning things from them as well, so for me it was easier, because I am an outgoing person and it wasn't as bad as I thought it would be* (06_HS04).

While the students shared positive experiences of residence life, spaces in residences are limited, and not all students might have reason to enjoy the social commitments and involvement required as part of residence life. This means that some students' academic success may be enhanced by the support structures built into residence life (for example, study space, 'house parents', and peer mentors), while others may experience residence accommodation arrangements as distracting, culturally misaligned and, therefore, less enabling. Some students described that the visibility of peers working long hours at communal residence study spaces motivated students to deepen their commitment to their studies and inspired their desire for academic success. The student below identifies the importance of peers and belonging in creating aspirations: *Everyone is determined… but the people that I surround myself with are determined to achieve their goals. I think it is a safe space for in terms of academics…I think it is easy for me to fit in… Because the university as a whole we have a common ground so I can work from that* (06_SS05).

The positive experience of residence life for first-generation students reflects the university's commitment to transforming alienating and racially

segregated residence cultures associated with historically White universities. However, other students who were less keen on residence life, valued a quieter living environment and described themselves as introverts who preferred 'doing their own thing' to the frenetic pace of social activities at residences. The campus environment beyond residence life also enabled students to cultivate belonging by participating in university societies, and spending time in communal spaces on campus. In the quote below, the freedom to pursue cultural-specific social connections is a valued part of cultivating belonging. The freedom to speak one's home language is a crucial part of developing academic identity, without losing a connection to home and community: *The main reason behind [the university society] is to help other Tsonga people to adjust to university life as soon as they get here. …spending time with my people who are speaking the same language makes me to realise that, hey, I must not forget where I'm coming from* (06_SS08).

Students described the campus-wide Wi-Fi access as an advantage, compared to having to wait in line to use the computer laboratory. Students also described how quiet spaces on campus facilitated their learning, supported by access to spaces that are clean and beautiful: *The campus is...large and …quite beautiful. And also, the cleanness of campus - ja that's great. It's clean… it is accommodative...because if you like your quiet space, there's a place for that* (06_SS07).

While students who are able to access campus benefit from available spatial arrangements, it is important to note that research into vulnerable students in higher education identifies loneliness, alienation and social isolation as problems for students who cannot afford the transport needed to attend lectures regularly, or who can only afford accommodation far from campus. One student who found it hard to integrate had this to say *...because where I come from, we get excited over football games, and here, I have never heard anyone talking about football, or they don't know anyone who plays football. It's all about rugby. It's a very unrelatable. When I came here, I could not relate to anything* (06_HS03).

The quote above reflects an institutional culture that is inherently alienating for black students, who are separated from their cultural identity and familiarity. The silence of culturally significant symbols in the quote above, may refer to other silenced knowledge, symbols or ways of being that contribute to students who experience a lack of belonging, or who feel pressurised to assimilate with dominant cultures. An in-depth understanding of how cultural identity is marginalised or silenced could be included in institutional transformation initiatives. It can also be argued that for first-generation students in particular, social integration mitigated the anxiety associated with navigating university life with limited financial resources. It can thus be highlighted that the experience of belonging to the university community is a valued capability for students whose struggle for recognition by university staff and peers is located at the intersection of race and class identities.

### Support related capabilities: Prospects and challenges in diverse university spaces

One of the important spaces where students required and received support that they perceived as valuable in assisting them in their transitioning to university life was psychosocial support. The students' preferred method of support was to build a therapeutic relationship with an FSA or a campus-based psychologist over time. To ensure the continuity of care and to maintain the relationship, some students described how they would travel to a different campus for consultations with a psychologist they are familiar with instead of seeking out a new psychologist on main campus: *I want to underline and bold that: student support. The beginning of first year at [satellite] campus I met [campus psychologist]. She's the psychologist at [satellite] campus so that's where I actually went for help. and she helped me with… emotional support, academics, career guidance, time management… that played a big role in my education life. Being able to manage time – that was the biggest thing that opened doors and my eyes* (06_SS04).

Student capabilities are linked to programmes such as the extended degree programmes. This is one of the four-year programmes offered on the university's satellite campus with high student support mechanisms which provides first-generation students with a structured, supportive environment that enabled them to adjust to university. Student experiences of the extended degree programme were predominantly positive, and most students reported that the bridging approach contributed to their academic success: *Then because it was an extended programme… we are giving you that bridging gap of saying you didn't qualify for a first option you, now need to ensure… you are ready for varsity. In the extended programme yes, things*

*are hard but … they try to ensure that everything is sorted. You are ready for varsity* (06_SS06). Students describe how they had reason to value being part of extended degree programmes, where 'special treatment' and additional time and attention were framed as valued opportunities. This challenges the notion of an extended degree environment as being potentially negative due to lowered expectations or a deficit framing of students and their academic potential. Students in this study framed their position in an extended degree as an opportunity to reach valued aspirations, instead of viewing themselves as less capable.

Students also reported receiving support from both faculties where staff members were said to be approachable, friendly and willing to assist with academic and administrative queries. In the interviews, students spent more time describing enabling and positive encounters with academic staff members than recounting negative experiences. Students did not report experiences of staff members who expressed negative attitudes related to student failure or incompetence, something which has been found to be a significant constraint to participation in research on vulnerable students (Calitz, 2019; CHE, 2010). However, students identified shyness, fear and anxiety as significant obstacles to approaching lecturers and participating in lectures. Vulnerable students' fear of participation and embarrassment is a persistent concern in creating access to powerful knowledge in higher education (Respondek *et al.*, 2017). Being too scared or shy to participate is a complex issue that could be partly understood as an expected part of the transition to a new academic environment. At the same time, students with access to fewer resources and opportunities for academic preparation have to compete on an unequal playing field, which could exacerbate their reluctance to participate and their invisibility in large and overwhelming classrooms. One possible institutional response to address student fear, anxiety and shyness could be to facilitate open dialogues about these issues in existing undergraduate academic support and mentoring programmes, in order to challenge shame and silence around these issues.

An aspect related to support by academics is access to capabilities for technologies which was reported as pivotal to academic success. First-generation students with fewer resources at school were less likely to have been prepared to work with computers, for example, and valued the opportunity to convert technology training into valued ways of being computer literate. The university provides a compulsory module for incoming first-years that teaches basic computer skills, which students identified as instrumental in their ability to use technology: *There is a module that we do that actually helps us … like it familiarises ourselves with computers and everything so I was able to get to learn* (06_SS02). *They teach you about computers. So, you become computer literate through the module. So that helped me a lot* (06_SS05).

Despite technology in lectures posing challenges for students with limited resources, some lecturers used technology such as clickers, which enabled participation for students who lacked the confidence to speak up in class: *But when you're pressing a clicker…nobody can see that you are the one that got it wrong. And I think that has opened up a window…when it comes to education* (06_SS03). It can thus be argued that Incorporating technology in lecturing might be another way to enable greater participation for students who are shy or hesitant to interact in the classroom, or to approach lecturers face to face.

## Analysis: Systemic and individual conversion factors that constrain access and success

### *The impact of Covid-19 on student access and success*

While the impact of Covid-19 was not included as a specific research question, students spoke about adverse conditions and challenges surrounding lockdown and the impact on teaching and learning. For students from marginalised backgrounds, going back home while having to adapt to an online learning model exacerbated their vulnerability. While many reported that residence and private accommodation provided stability and a routine that is conducive to learning, having to go back home during the university year created significant disruption: *It was a situation of data issues. I can say like March [2020] we were sent back home and two weeks later, three weeks later we were sent emails, no learning must continue and all those things. But seeing that hey I don't think that my home environment was very much conducive. Because one I have network issues…* (06_SS06_0831).

Although the Covid-19 pandemic had a profound impact on all university students who make the sudden shift to an online learning environment, poor students are more reliant on access to resources at university such as Wi-Fi, mobile data, meals, library access and

study space, compared with peers who are able to compensate for the lack of these resources using family and community resources.

*Massification and student preparedness amid the first-generation status: Support and constraints from family and community*

Massification and its effects on institutional resource utilisation was reportedly an issue especially in relation to pressure exerted on those directly involved with teaching and learning. In this regard, student success was reportedly manifest in increasing pressure on staff to balance commitments to undergraduate teaching with research outputs and administrative tasks. Since most academic staff participants in the sample were from the Arts faculty, the interview data reflects their responses, although it is likely that the realities of massification also impact staff and students from the science faculty. With rapidly expanding student numbers, lecturers struggle to provide individualised feedback and engagement, given the reality of higher education massification: *[T]he government has been pushing massification, increasing student numbers and universities have been complying with this, but university resources haven't been increasing to keep pace with the growing numbers of students* (06_AC04).

Massification and its influences on the academic programme also need to be explored within a context of students being under prepared as well as related to forms of support such as family and community as having a bearing to student capabilities towards academic success. Student preparedness for higher education is complicated by questions about institutional arrangements that could enable student success as part of the broader question of how first-generation students manage their transition to higher education. The question of academic preparedness loomed large in staff experiences of undergraduate teaching and learning, and also emerged in student interviews. Student experiences of academic preparedness focused on the anxiety about being under-prepared academically, compared with their peers: *My first laboratory work was very difficult because I didn't know most of the apparatus that I have to use. So ja I didn't know like the names, so it was very hard to locate my things ja like that because there were no labs back at high school* (06_SS02).

Of importance is that beyond identifying systemic injustices, staff identified alternative reasons for students' changing literacy skills, such as the use of social media, which is a constraint relevant to a broader spectrum of university students. Staff reported being frustrated by the systemic reasons that students are under-prepared for the demands of university education, the foremost being South African's historically segregated schooling system that continues to offer poor quality education to many black learners. Most staff experiences of student preparedness reflected a nuanced understanding of the systemic conditions that create skills gaps for vulnerable undergraduates. This is an important shift away from a deficit approach to student underperformance in higher education. Instead of individualising the students' struggle to adjust to the academic demands of university life, lecturers reflected in depth on the social injustices that continue to disproportionally marginalise black students: *Our education system, the basic and higher education, disadvantages black students who were disadvantaged in the past under apartheid, and they are continued to be disadvantaged now…So it's made me very angry that this government has failed black people in the same way in terms of disadvantage…* (06_AC04).

When it comes to the first-generation status, many first-generation students must navigate a marginalised status at the intersection of race and class, which leaves students vulnerable to social isolation. Students across the faculties highlighted how family and community tended to produce contrasting forms of support with the former being viewed as being a valuable form of support in and outside the university setting whilst the community attracted negative reactions despite expectations on the contrary. Family and social support structures outside the university offer important coping mechanisms for students (Roksa & Kinsley 2019; Roksa *et al.*, 2020; Sullivan *et al.*, 2018). While research into vulnerable students has found that community resources can offer support (van Breda, 2017), some students in this study described their home communities as negative, toxic or disabling, while university life provided an escape from adverse conditions and an opportunity to cultivate aspirations and an independent identity: *So now as a young one you don't get inspiration; you don't get inspired [by the community]…So now the inspiration is being dragged down, more like we're just surviving* (06_SS01).

The adverse community conditions reported by most students at home reflect socio-economic inequalities within communities, which are grappling with the long-term impact of historical injustices, marginalisation and exclusion. It would be interesting to understand how

first-generation students balance their emerging academic identities with the perceptions of a dysfunctional community environment. Some narratives hint at an identity struggle as students seek to adjust to the requirements of an independent, successful individual, while remaining loyal to a community identity that has been historically projected as deficit or inferior. For instance, to prove their academic worth and competence, students are expected to navigate academic knowledge using English as the medium of instruction, which creates a barrier between the individual and their community.

### Student experiences of resource provision at the university

Students from disadvantaged backgrounds described serious obstacles to securing basic resources such as food and accommodation. This created stress and anxiety around maintaining access to higher education throughout the course of their degree, and not losing funding due to academic exclusion (Hoppener & Calitz, 2018). Overall, poor students struggled to navigate their limited financial capacity relative to peers with more resources. This relates to academic and social identity formation, particularly for undergraduate students for whom university is a space to cultivate an independent identity. The resources required for identity development are distributed unevenly for poor students, this complicates their successful transition to university life. While all students who were interviewed received NSFAS funding, their experiences indicate a significant socio-economic divide. While some students struggled to meet basic needs such as food, electricity and transport, other students with greater access to financial support resources at home aspired to university-related expenses such as stationery, entertainment, clothing and social activities. This was to mitigate their first-generation status and the associated anxiety about fitting in with peers on campus: *Now having to transfer to [main campus] ja I would feel out of place, number one the factor of finance. You know not having the nice clothes that affect us as teenagers or youth at that time…* (06_SS04).

### Institutional culture, transformation and decolonisation

A university's institutional culture is pivotal to systemic transformation and creating a conducive environment for pedagogies that can result in student success. Historically white, Afrikaans-medium universities face challenges in transforming their institutional culture to be more inclusive of a diverse student body. Staff members with a longer institutional memory reflected on how the institution has transformed during the past decade. *The institution is definitely changing and trying to widen access and to decolonise its own image. I mean obviously decolonisation in terms of teaching that would generally depend on individual's own internal calibrations. But the institution itself has tried to go a long way in democratising access in some of the spaces there* (06_AS03).

Staff members thus experienced significant institutional change driven by university management, which in some cases encouraged their own commitment to the transformation of their modules. Yet while important demographic shifts have occurred, institutional cultures require ongoing transformation. It is important to also note that despite reports of positive institutional change, students and staff acknowledged that persistent forms of racialised social engagement and divisions existed on campus. Racial discrimination is often part of an institutional culture that marginalises individuals on the basis of racial identity. This is particularly relevant at historically white universities that have a history of race-based exclusion. Race-based discrimination can affect student success by decreasing their sense of belonging to the university (Kessi & Cornell, 2015; Morales 2020). Racialised discrimination is complicated for rural students whose identities create an intersectional vulnerability related to stereotypes about race, class and academic competence (O'Shea *et al.*, 2016). While overt instances of racism were not reported in student interviews as a part of the daily experience at the institution, some students and staff described subtle or downplayed forms of racialised discrimination: *[the university] has this tendency of preferring like White people to blacks. So I'd say they must remove this thing of their whiteness and be welcoming to each and every nation…that is one situation that they need to deal with…they must remove their racist undertones* (06_SS06).

The road to transformation ought to be understood within a context in which the university adopted a new language policy in 2016, which led to the official removal of Afrikaans as a language of instruction in 2019. Although the revised language policy positions English as the language of instruction, the use of Afrikaans was a constraint that excluded students from participation in the academic and social life of the institution. While students and staff agree that the removal of Afrikaans is a significant part of the university's transformation, other language issues remain unresolved, such as English as a language of instruction that remains a barrier to student success.

Views of lecturers remain crucial on the university's decolonisation project and this study revealed marked tensions and disagreements on

the issue. Some staff agreed that curricula, institutional spaces and cultures should be decolonised. While staff members utilised different mechanisms to attempt to decolonise the curriculum (e.g. critical of texts and examples used while teaching), some lecturers are concerned about the needs of 'under-prepared' students and question the relevance of decolonising. These lecturers indicated that resources and time should be invested in developing students' academic competencies instead. Overall, staff conceptualise the decolonising project as a continuation of the university's ongoing transformation. Staff responses suggest that the decolonising project demands focus, energy and commitment. Most lecturers pledged support to decolonising as an institutional project. *I was actually called in and told to decolonise [my module]… My answer was simply: how do you decolonise [a scientific subject]?…What is scary for me is that a lot [of black students] they're sending me these hidden messages that "Dear Dr [X] let's not have too much decolonisation because we are tired of the whole decolonisation discussion". So, my question is again: for whom are we doing it?…* (06_AC02).

Students also held perceptions of decolonising the university. While staff appear to have more sophisticated conceptual and practical understanding of decolonising, students' understanding, experiences of decolonising were marked by uncertainty about the definition. The interviews show that student and staff engagement in the classroom and informal campus spaces is an important part of mediating student anxiety around transformation, and students' ability to make sense of their role in institutional transformation. Most students were not familiar with the concept of decolonisation and did not engage with the concept as part of the interview. Some students shared their experiences or perceptions of changes around decolonising, which was often associated with the language policy and racial inclusion: I think ever since I've gotten here, I think the university has quite transformed because now it is more inclusive...*My experience has been okay no problem. I had been able to interact. I didn't feel like we still need to do more work here in this certain space* (06_SS01).

### Conclusion: Capabilities for access and success in higher education

The university remains a complex space where students and staff navigate academic and social identities, opportunities and aspirations. The snapshot of staff and student experiences in this report point to capabilities that are important for academic success, particularly for first-generation students with precarious access to financial resources. The list of six forms of capabilities for access and success explored in this report is not exhaustive but captures significant freedom that students and staff have reason to value, as they pursue academic and personal aspirations at the university. The capability set considers structural aspects that impact on individual and collective freedoms, specifically institutional transformation and the challenges associated with the massification of higher education. Below is an outline of the six forms.

### Capability for social belonging

Capability for social belonging is related to forms of support including family, peers and individuals that students draw from as they transition into university life. The study indicated that students, value opportunities aimed at cultivating a meaningful and sustained sense of belonging, which they described as being part of a family, having access to dependable adult mentors, and receiving consistent psychosocial care and support.

### Capability for academic and social support

Responses from students and staff indicated the need for cooperation and collaboration between undergraduate students, lecturers and support staff in their attempts to enable access and success. Specific support mentioned by participants related to faculty-specific advisors and campus psychologists who provided career guidance, motivation and academic skills such as time management.

### Capability for confidence

This capability indicates that while students value being able to function as confident and articulate members of the university, they describe fear of embarrassment, self-doubt and anxiety as constraints to belonging in their academic obligations. It is striking how many students shared that they are not confident in their ability to contribute to debates in a lecture, to ask a question or to approach a lecturer or peers. This is an important area that could become the focus of institutional support and development initiatives that target first-generation students' limitations.

### Capabilities for institutional transformation

The university's transformation agenda has involved implementing significant shifts in its culture, curriculum and pedagogy. Individual and institutional efforts to transform and navigate institutions rely on the everyday individual and collective agentic actions of students, lecturers, support staff and administrative staff. The language question remains a contentious issue on campus, with examples of the use of Afrikaans in pedagogical spaces that exclude African students from access to knowledge and a sense of belonging on campus. Transformation ought to address the often hidden and implicit ways that language use still has the power to alienate and exclude. Transformation initiatives could consider how the intersectionality of race and class emerge in student and staff experiences, and the impact on student access and success.

### Resource security

First-generation students, lecturers and support staff confirm that physical access is still a constraint for many students: bursaries do not necessarily cover the expenses needed to successfully participate in the academic and social life of the university (Potter *et al.*, 2020). Students without sufficient resources practice resource sharing, particularly within residences. Food and academic information emerged as the two most important shared commodities with support from family and other networks deemed more important compared to community.

### Capability for resilience

Students' narratives offer many examples of resilient responses to environments that may not be conducive to academic success. Emphasising student resilience and the agency to effect change within an institution is an important shift from descriptions of students as victims of institutional injustice. Evidence of staff agency includes evidence of staff creating opportunities for engagement with students, despite the challenge of reduced resources and massification.

# Chapter 7

## Student Epistemic Access and Success at a Historically White University: The Case of the University of the Witwatersrand

### Introduction

Full university status was granted to the University of the Witwatersrand, popularly known as Wits, in 1922. Wits is a research-intensive university situated in the City of Johannesburg. This geographical location puts the university in the limelight considering that the City of Johannesburg is not only the largest city in South Africa, but it is also among the most populous African cities as well. The university is not far from the grime and precarity of the city centre of Johannesburg, and can capitalise on the many dynamic opportunities in the space, which is unique in South Africa (Amato, 2021).

The case study argues, among other findings related to student success, that students' experiences prior to enrolment have an impact on university experiences of the students, and consequently contributes to their future. Another key finding is student resilience which not only implies "mindsets, behaviours and resources that can be cultivated and developed, but it also entails a sense of self as someone who recovers from setbacks" (Baldwin *et al.*, 2020, p.19). Although epistemological access largely remains a battle for those who succeed, students gain access partly because of being inspired to, even before enrolling at Wits. Both students from disadvantaged backgrounds and the institution could however still work in unison to promote positive experiences for students on campus, as Baldwin *et al.* (2020, p.26) argued that 'efforts on both fronts need to work in tandem to maximise the potential for success for students'.

### Background and history of Wits

Wits, established in 1896, is the third oldest university in the country. Wits has largely maintained its culture, as an historically white university, which corresponds more to the 'highbrow' middle class culture (Sullivan, 2001). Many students coming from black, disadvantaged backgrounds do not subscribe or relate to this culture. The expectation is for students to assimilate to the culture and disposition (habitus) in order to enhance their learning and ensure their survival. Students coming from working class backgrounds (township and rural areas) experience cultural shock. Becoming accustomed to the medium of communication (English) and developing academic skills such as writing, analytical and critical thinking, ICT capability and independent learning, proves to be a struggle for most students coming from disadvantaged backgrounds (Cross & Atinde, 2015).

### Reality of being 'disadvantaged' in a higher education environment

Most students deemed as disadvantaged come from backgrounds that are characterised by resource constraints and inadequacy. This is reflected in the home environment and the quality of education prior to entering higher education. Unlike their counterparts from middle-class families who attend mainly well-resourced urban schools; either former Model C or high-fee independent schools, those from rural and township areas generally attend schools that were under-resourced including reduced teaching capacities (Jones *et al.*, 2008).

Wits adopted a system of fair discrimination in its admission policy once it realised the struggles and unequal opportunities facing rural and township students. Wits apportions quota to top-performing rural learners as well as those from Quintile 1 and 2 schools in townships (Matsepe *et al.*, 2020).

Despite the seemingly positive move ensuring access to disadvantaged students, there remain trends that reflect the gap in epistemic access evidenced by student throughput, retention and success that tend to favour historical patterns of privilege. The experience in most universities, including Wits, could be what Dawes *et al.* (1999) described as the 'revolving door syndrome,' where the efforts made to incorporate disadvantaged students result in their being pushed out of the system as a result of failure to negotiate the system (epistemic access). Letseka and Maile (2008) revealed that as much as 70% of university dropouts came from disadvantaged backgrounds. The CHE (2010) reported 30% of students across faculties at Wits graduated within the recommended time, with 70% graduating within two years of additional time. The report further claims that black students continue to lag White students in completing their programmes (CHE, 2010). The question asked in this case study though is what explains the success of students from disadvantaged backgrounds?

### Conceptually framing students' success

Issues of access and success at university closely relate to culture and its various facets interacting between the higher education institutions, the staff and the students. Vasyakin *et al.* (2016, p.115-6) point out that organisational culture impacts on its members since it includes a system of rules and work guidelines, both formal and informal, as well as a range of rituals and traditions, behavioural patterns of the employees working within the given structure, management style and levels of cooperation. The implication here is that organisational culture has an effect on employees' work attitude, sense of obligation and responsibility towards each other and the organisation at large. The ways these aspects play out are likely to affect the students' interactions on campus.

Campus culture is a combination of various cultures created jointly by all university actors and accumulates in the long-term process of institutional governance (Shen & Tian, 2012). Campus culture is characterised by certain ways of doing things, communicating and merging new cultures. The construction of campus culture could be constrained in various ways. Constraints include restrictions from people, their abilities and capabilities to determine the quality of academic activities, from the campus value systems and policy orientation, regulations and interpersonal relations as well as restrictions from material conditions (Shen & Tian, 2012).

Campus culture comprises three aspects: institutional culture, which involves the systems' operational rules and regulations, rituals, traditions, management, and restriction mechanisms that guarantees the orderly development of campus culture, with goals and mission defining institutional values, institutional culture impacts on its members; material culture involving facilities and the environment; and spiritual culture involving individual cultural activities showing values and behaviours (Shen &Tian, 2012). 'With different culture values, different forms of activity, plus different forms of culture converging on campus, campus culture becomes diverse and dynamic' (Shen & Tian, 2012, p.62). The manner in which campus culture is able to draw out the reasons for student success at Wits is explored in the remainder of this section, from the perspective of two faculties, humanities and science.

### Faculties of Humanities and Sciences at Wits

Wits has five faculties, each with a number of schools. For this study, attention is on the faculties of Humanities and Sciences. The Faculty of Humanities has six schools, and the Faculty of Sciences has nine. Geographically, both faculties are in the Braamfontein area with the Faculty of Humanities based on the East Campus, and the Faculty of Sciences on the West Campus. Interestingly, Ndofirepi (2015) found that while faculties share campuses and infrastructure the students from different faculties tend not to mingle. She argues that students in the Faculty of Humanities present a smart, outgoing and professional demeanour while students in the Faculty of Sciences express a serious, laboratory-bound and industrious disposition (Ndofirepi, 2015).

Chapter 3 reported that Wits offered three-year and four-year B-degree qualifications, not three-year diploma qualifications. For three-year B-degrees Wits, together with UL were shown to have the highest throughput of participating institutions (63%). On the other hand, for the four-year B-degree, Wits had the lowest throughput (57%) amongst participating institutions. At the same time, the throughput for Humanities four-year B-degrees at Wits is 69%.

The average throughput at Wits in the Humanities reported in Chapter 3 for the 2014 cohort was 65% and in the Sciences, it was 57%. This means that the majority of students who registered at Wits in the Faculties of Humanities and Science in 2014, graduated. The remainder of this case study contributes to the explanation of why this might be the case, focusing specifically on students from disadvantaged backgrounds who have reached their final year of study.

### The Wits' culture of excellence

Wits' three key ambitions, that is, being 'locally embedded, nationally responsive and globally competitive', are reflected in policy documents (Wits, 2019a, 5). The Wits policy framework and reports articulate key areas of concern together with successes or failures in line with the university mandate. Together the Strategic Frameworks, Annual Performance Plans, Teaching and Learning Plans as well as the Enrolments Plans, articulate the trajectory that the university is embarking on.

According to the Five-Year Review of Teaching and Learning 2015-2019 (Wits, 2019a), the enrolment figures have increased from around 29 000 in 2009 to about 38 000 in 2019. The Review points out that:

> *The thrust of the 2009-2013 Teaching and Learning Plan, linked closely to the University's enrolment plan, thus centred on facilitating access to higher education for students from all backgrounds, and transforming the student body in terms of race and gender to broadly reflect the demographics of South Africa* (Wits, 2019a, p.5).

Whereas the 2009-2013 Teaching and Learning Plan mainly focused on enabling access to Wits, the thrust of the 2015-2019 Learning and Teaching Plan was ensuring access with success. This shift has contributed to the Wits' success in graduation and the success of students. The Wits' Vision 2022 Strategic Framework goals (Wits, 2010) also shows a reframing of university activities towards promoting epistemic access with success. This reframing of student success occurred through collaboration and synchronisation of student support initiatives across the University's five faculties. This took the form of a tiered and deeper structural mapping by the Teaching and Learning Committee whose mandate is to promote learning and teaching initiatives across the institution.

There is a Student Success Steering Committee that takes charge of 'both faculty-based and institution-wide efforts to promote student success and identify areas in which student support is needed and opportunities for synergy among existing initiatives' (Wits, 2019a, p.11). The First Year Experience Committee, created in 2017, attends to student issues of transitioning from the high school environment to that of the university. This committee, together with other representatives from the faculties, run a number of student support initiatives ranging from orientation to using digital literacy for first-year first-time entering students in the first few weeks of the start of the year. This is on the premise that 'successfully navigating the change is the first step towards being a successful student' (Wits, 2019a, p.11). 'This tiered committee structure is intended to encourage widespread participation of staff and students at multiple levels in the institution in promoting good teaching and student learning' (Wits, 2019a p.12).

Other university-wide student support structures in place include the Wits Writing Centre, the Counselling and Careers Development Unit (CCDU), the Disability Rights Unit (DRU), the Financial Aid and Scholarship Office (FASO), and the Campus Health & Wellness Centre (CHWC). The university has a very strong data analytics office that provides statistics to inform student support interventions.

Each faculty has support staff (previously called 'at risk coordinators', but now called 'academic advisors' or 'student advisors') who serve as the first port of call for students who need help or are at risk of failing. It is reported that each stakeholder 'in the student learning experience has a role to play in helping students to develop the discipline-specific and generic knowledge, and lifelong learning skills they will require when they graduate' (Wits, 2018, p. 12). Prior to the university implementing this system's approach to student support, activities and initiatives were diverse and decentralised within faculties which resulted in faculties working in silos.

The university-wide student support programmes include but are not limited to the First Year Mentoring Programme, the First Year Orientation programme, and the Early Warning System – for identifying students who are potentially at risk of failing. Participants were satisfied with university support programmes. Students have the general view that the university is trying its best to support the students

> *In that sense, in terms of services rendered to me by the university, I can't complain* (08_SS01).

CCDU was frequently mentioned by the participants as a welcoming space for students, which enhances their well-being as well as contributing to their success:

> *Well, with the CCDU they used to have those programmes where they would teach you how to manage your time, because I used to be very bad at managing my time. So, you know I would go for the trainings to know how to manage my time and also like how to keep mental health in a good, you know space all the time and they would also have those seminars of exam stress you know when exams come, people become so stressed. Ja, so they had so many programmes that were so beneficial to me* (08_HS05).

> *I think the CCDU also does help. I have never been there, but other students do say it's very productive because most of the time they send helplines or any information about any mental health issue. I think it was early last year they were in the corridor with a big sheet where we had to draw, I found that very interesting, and it was in a way for us to de-stress* (08_HS14).

Other structures that were seen as aiding their success are the Writing Centres, Wits food parcels and the SRC: One participant echoed:

> *I am grateful to be here. Wits has food parcels and we also have Wozani Gift of [the] Givers* (08_HS14).

Wits has also established a Targeting Talent Programme. This programme focuses on high school learners who have the potential to enter higher education. It is conceived of as a pre-university enrichment initiative for Grades 10 and 11 learners selected from different schools across South Africa. The aim of this programme is to increase the academic and psychosocial

> *preparation of learners from socio-economically disadvantaged backgrounds for admission to any South African university, not specifically Wits. The programme also assists high school educators from the same schools with pedagogic and content skills in the teaching of mathematics and science* (Wits, 2019a, p.6).

This programme could also be regarded as an acknowledgement that students from disadvantaged backgrounds require support to access higher education.

**Motivated to be at university and succeed**

For most students interviewed, the decision to go to university was accompanied by the choice of university. The choice was informed by the university's ranking, people's perceptions, and social media.

*It's in the top 1% in Africa so I thought coming to this university would maximise my opportunities of getting a job as soon as I finish my degree* (08_SS08).

*This is the best university. So, for me it is a privilege for me to be studying in this University. I feel like it's a great privilege for me. In fact, it's just an advantage for me to be in this University. So, I feel great to be in this University* (08_SS08).

Participants relate that the intention to enrol in university came at different moments in their lives and via a variety of sources. One student stated that they wanted to go *ever since I was in primary school, I've always wanted to go to university* (08_SS09).

For other students, the thought came during their early grades of high school, as highlighted by one participant:

*For me I wanted to go to university when I was in high school some people I got motivation from went to university, the brothers and sisters around the community. I wanted to improve the situation at home and because my mum told me you have to go to school and study so that you can live a better life compared to mine* (08_SS03).

Students sought advice from friends (08_SS10_0517; 08_SS07_0520) and relatives about the institution that they would attend specifically:

*I decided to choose Wits because my auntie, my mum, my mum and uncles, people thought that it would be the most convenient* (08_SS06).

Teachers also played a critical role in motivating students to ensure they are able to gain access to university. Two participants explain how teachers motivated them:

*Our teachers used to scare us on like, 'yeah, you guys are like playing right now, university is going to be really hard. You're going to be competing with students from Model C schools and everything will be really difficult'. So, I was kind of scared and had anxiety. But I feel like that helped me a lot because I really focused a lot and I studied too much because like the things that they told me about university kept on like coming to my mind like, I will fail here, and I will go back home and just start over and be poor* (08_SS09).

Thus, parents, friends, siblings and teachers all have a big influence on how these students chose institutions. In some cases, extended family also become like role models' participants wanted to emulate and would encourage them:

*I saw my uncle and my aunt coming home with the university things, with the pens and the t-shirts, so that's when I said I also want to see myself going to university and my uncle would come home with the university prospectus, and he would give it to me and say go through this and just look at it and you come and tell me what you see, on that prospectus, and I would go with it to school, tell my friends about it* (08_HS07).

For others, the initiative to go to university was internal even before they matriculated:

> *Ok so since grade 10 I had an interest in studying about the stars. I was interested in physics. I wanted to know more about what other scientists know. So, I decided to take Mathematics and Physics and then I made it in Grade 12 into Wits University and then they took me on with my first choice which was astrophysics* (08_SS08).

The idea of Wits being a prestigious university and many students aspiring to get a certificate from such a university (Ndofirepi, 2015), was reinforced by a member of the academic staff:

> *Majority come to Wits, because they still feel it's a prestigious university and they want to be there, they think that they're going to walk away with the certificate that is going to open doors for them* (08_AC06).

Student participants in the Wits case study thus reported being motivated to succeed at university before they entered.

Gaining formal access was also facilitated by others within their social networks. Above the excerpt refers to a participant's uncle sharing the university prospectus. Other students have been guided to navigate processes to assist with financial challenges. One participant explains how a sibling's friend guided them through the process to waiver registration fees, for instance:

> *I remembered that the second born (my sister) has a friend who is doing Mechanical Engineering here at Wits. I decided to reach out and I was like "hey can you help me with applying". She was like I can come to Wits and I will help you waiver the registration because I didn't have the registration fee* (08_HS13).

If students did not arrive at Wits in the first place and if they were not guided through specific processes when they otherwise would not have had the resources to do so, they would not have been able to succeed. Given the complex and multi-faceted nature of poverty and inequality in South Africa, it is not surprising that some students will struggle with financial process challenge. It should thus be sufficient for institutions to acknowledge it as a phenomenon and provide clear processes that all students know about to ensure that students experience relief.

Students who participated in this study expressed confidence in themselves:

> *if I had excelled in Grade 12, therefore, I would excel even in university. So that was my imagination of how university life would be. That I'm going to ace everything, that I'm going to have a smooth sail and all that and then in terms of res life and all that, I'll have my own freedom and then I can do what I want in the time that I stay there* (08_HS06).

Participants in this study were proud of their connection to Wits:

> *Every time I would arrive on campus I would be like, okay, I'm in Wits. That's what happened on a daily basis. Oh, it's cool, oh I'm in Wits* (08_HS04).

### Student background and culture

The participants offered very rich narratives about their background. They chronicled their experiences in their families, homes and communities. Participants were either from rural or township areas and are the first in the family to attend university. The Wits Five-Year Review 2015-2019 (Wits 2019, p.6) states that "Five years ago, fewer than 20% of Wits students were the first in their families to attend a university. Today, this applies to almost 48% of first year entering students".

The participants' narratives about their home, community and school backgrounds portray a relatively homogeneous picture with regard to specific facets. For example, more than 80% of the participants' households are headed by either their mother or grandmother. In most cases, the households are extended as well, comprising siblings, nieces/nephews and cousins for instance. Finances, moreover, is a struggle. The mother is generally the breadwinner, and, in some cases, the household is entirely dependent on the grandmother's social grant. The participants' narratives reveal a manifestation of familial and social capitals coupled with bonds and emotional support from the mothers and grandmothers. Baldwin *et al*. (2020, p.18) maintain that families reinforced certain values and qualities. Students tended to uphold these and followed them as undergraduates. Family bonds that emerge through the process of struggling to meet financial demands coupled with the desire to make a positive financial contribution to the family could be a powerful motivator of student' success.

The rural communities are characterised by low income and experience high levels of unemployment exacerbated by low socio-economic development. Students who come from these rural settings report poor but supportive communities in terms of imparting morals and values, insofar as the general well-being of the people is concerned. The students promise to uphold these when away from their communities. On the contrary, township communities are not supportive of the youth. Participants from townships reported a high prevalence of drug and substance abuse, teenage pregnancy and theft where they come from. The desire to maintain moral values as well as the desire not to be part of activities that are not conducive to success could spur students from disadvantaged backgrounds to achieve success at university.

Although family and community values contributed to students' approach to their studies, they also reported the prevalence of adversity and feeling alienated from communities once they are at university. The responding students pointed out that by going to university, they become vulnerable and faced the risk of resentment and exclusion by their communities:

> *And then the stigma around the community will get to you because like, now they feel like you are more important, you think you are more important since you are at varsity* (08_HS04).

During semester breaks, some students involve themselves in their communities to show their allegiance to the community, preserve their membership and regain community trust. Although stigma might be perceived as negative by students, it might also contribute to motivating them to succeed. Failure would mean returning to the communities without having graduated.

The challenges that students face at home are viewed as drivers for a better life. The students were able to change their mindsets and find inspiration from their negative experiences. Two participants explained this aptly:

> *… from there, it's a matter of looking back and then saying …. you don't want your kids to experience what you went through … these were the conditions that I encountered, these were the challenges that I went through, but then for future purposes, I should shape my mind in this way. I had to change my mindset just to be; this is what I want to change, this is what I want my future to look like. Hence, those challenges kind of shaped the way that I perceive things … my immediate context … to say: this is what can be transpiring at the moment but that does not mean it's what should transpire in the coming years. So that's how the challenges came in shape in my frame of mind…* (08_HS06)

> *And I was expecting varsity to be like, oh, a place of self-realisation, a place of professionals, a place of young people who are there to inspire and empower others. I saw varsity as like an opportunity to beat poverty* (08_HS04).

Others' failure inspired participants to persevere and kept them motivated to succeed as well:

> *I've learned from hard work. I've learned that hard work from home and perseverance … I should not give up on my studies, ja that's what I've learned. Since if you are from … some of the people are at home, or maybe have dropped out or ja, I can see that they are not doing well in life, so I get perseverance and hard work* (08_SS03).

The responding students drew their aspirations and hope from the challenges they face and witnessed. According to Baldwin *et al.* (2020), some individuals have the ability to maintain hope from actual and perceived challenges. They become successful because they are gritty, feel at home in the learning environment, believe they can get smarter, and overcome a variety of challenges. This has been described as aspirational capital as the students strove to work harder and become better people. It is also a form of resilience involving 'nurturing a culture of possibilities' (Yosso 2005, p.78).

Actively initiating social circles with other students of similar backgrounds to share survival strategies in alienating spaces were reported by student participants:

> *I had friends, as I told you. Like most of my friends I met them at Bree taxi rank because we used to travel together to Wits University, coming from Bree, walking past Mandela Bridge. And most of us our experiences were the same. We came from backgrounds, economic situations which were not ideal. So, having them in my life really changed me because they helped me to adapt. They were there for me, and they helped me to cope with my fears as well, like the fear of failing, the fear of being not accepted fully, that social steps of diversity. Ja, they were there. So, I used to talk to them about what did they experience on a daily basis, and they would give me strategies as to how should I deal with such. So, it really helped me a lot* (08_HS04).

Another participant explains the crucial role of finding a social space one can belong in:

> *I don't think it possible, because, who I hang around with, I have things in common. So, I find that small community that I have things in common with, and I feel at home, but at the same time, when I am not with that group, you can feel that you are not part of what is happening here, especially with the lifestyle that people live* (08_SS01).

One participant said that at times it was not easy to make friends, but the opportunity to make friends was presented during co-curricular activities:

> *I played soccer and had group study and then became friends obviously. We would play games, go out for braais or for ice cream, or for coffee. I think I have made so many connections* (08_SS01).

Both in their academic endeavours, as well as their general survival in university, these students developed dependence on one another. They complemented each other by filling in their perceived gaps of inadequacy. This was witnessed with regard to challenges in academic work, skills deficit, and basic need inadequacies such as food, accommodation, and companionship.

During the entry experience, most respondents admitted to drawing strength and confidence from their networking with others from similar backgrounds. There was a sense of security even about food in realising that they were not alone in the deep end. Being able to encourage and support one another enabled them to resurface, as one of the participants commented:

> *I could say, God. I prayed a lot sometimes I would go to school and come back only to find that there is no food, and my roommate is eating pizza. On the other hand, I am tired, hungry and I still have to study because there is an exam tomorrow. I would be like God I give up. But I would then pray and say I know why I came to the University and so I need to push. I prayed a lot and talked to my sisters for they are my support system. At a later stage, I found friends at res, and we could help each other, in case I needed help with food, bathing soap, etc* (08_HS13).

With funding from NSFAS and the Funza Lushaka[16] Bursary, many participants felt grateful that such bursaries will help them succeed and move out of their misery:

> *So, things got better when I had financial assistance from NSFAS. My mother as well was also relieved in a sense* (08_HS04).

It is important to note that some students use the funding to support the family back home. However, realising that the funds are insufficient to cover their needs and their families' needs, they embark on part-time jobs, which compromises the time they should spend studying:

> *So, I had to have like a second job other than being a student. Like I used to work on weekends, go out tutoring learners and getting paid like… how much was it? R400. So, I used to use that money to support my family and my siblings at home* (08_HS04).

The above narratives show that most of the students get some funding at university. What could be lacking are skills in managing the funds.

16 Bursary scheme for South African students registered for teacher education qualifications that are in demand.

### School culture of students

The majority of the participating students come from poorly resourced rural schools. In some cases where resources are available, they are never used:

> *…the school was not so well resourced…we had laboratories, computers, but then we lacked teachers who could teach such subjects* (08_HS04).

The majority of the participants were also high achievers in high school. This was despite reports of teachers either socially being absent, disengaged or not qualified to teach subjects. One participant said about the teaching and learning practices:

> *the learning was… more of a rote learning, where you have to cram, cram and then not necessarily learning taking place. So, I had to reflect on how I take charge of my own learning* (08_HS13).

Other participants related experiences of teachers:

> *In my community, I think most of the teachers who were teaching there, it's either they hated their job, or they did not want to teach there at all. Sometimes learners in the classrooms we used to teach ourselves. [The teacher] would just get into class… and then just write notes for us on the board* (08_HS04).

> *Teachers at school were busy with their lives. I don't think they took time to ask are you ok? Are you coping? Do you understand? Sometimes, I would just ask myself why can't she (teacher) just ask what's wrong? Why am I not coping? Why are my marks like this? At high school, they just touch and go, and at the end of the day what did I learn?* (08_HS13)

Participants' struggles at school appeared to contribute to their success at university. The students learnt to take their learning into their own hands and become determined. They also learnt to persevere.

> *… So, it was like a motivating element for me … and, then say; I want to achieve way more than being enrolled or studying at the college. Hence, I was able to push harder, to ensure that I get access to university and then fortunate enough, it was one of the best universities that I got enrolled in* (08_HS06).

> *… the most important lesson that I've learned is to make the most out of everything that I get. No matter how much it is, like try to do something out of everything that I get, even if there are no resources, I should try to like give my best and the outcomes will always be good if I put in the hard effort* (08_HS08).

### Determination and resourcefulness

Students used resources from within, around and beyond them to overcome failure and emerge on the surface to achieve success. One such instance is the experience narrated by respondent (08_SS02_0519) on their academic experience during their first year in university:

> *…I've struggled with most of those, like maths, physical maths and chemistry during first year. But then I made sure that I studied hard towards the end of the semester so that I can get good grades, like I failed a lot of tests during that first year, but I made sure that during the exam I go all out and pass at the end, and I did that* (08_SS02).

Resourcefulness appears to foster independence and initiative:

> *I learnt study methods which I'm using now from YouTube so that helps, which is active recall, so I use a lot of YouTube to learn more study techniques that actually work* (08_SS04).

The students had a fighting spirit, refusing to submit to failure through sheer determination driven by some set goals and aspirations. One participant explains her academic journey in the following manner:

> *… so there was a lot of shifting and change which occurred in terms of my academic performance. I would say that during my first-year level of study I would obtain fifties. I would perform maybe up to sixty which would basically be the maximum mark which I got. And then as I got used to the university life, you know, consulting, associating, talk to people, I saw how things are done, how can I change my study methods and stuff like that there was change regarding how I performed. I then managed to obtain distinctions which actually made me feel proud of myself because I could then realise that you know what, I'm also capable and able* (08_HS03).

Student participants were motivated to enter university. They are also motivated by what they might achieve when they leave and what their lives might be like in future. Two participants provided an example of this; one very specific about their future professional life and the other more generally about living a good life:

> *So, I want to be a Professor especially for Languages, I love languages. So, that's something I am looking into. I just hope responsibilities won't stand in my way* (08_HS13_1015).

> *Oh, my aspirations for the future. I want to live really comfortably; I want to live a very comfortable life. I want to make sure I get my education and I work the job I like* (08_SS09).

Some participants have plans to continue with their studies and even have plans beyond the PhD:

> *Well next year I'll be doing my honours if everything goes to plan. Then next year I'll be doing my Master's. Then after my Master's I will go and … do my PhD. Four years later I would like to move to the USA to work for NASA [National Aeronautics and Space Administration] if everything goes to plan … that's what my plan is* (08_SS08).

Other participants have hopes of starting their own small businesses as echoed by these two participants:

> *My aspirations really are more economically inclined rather than academics really … I love their ideas and taking those ideas and making them a reality … I aspire to own like a market that is owned by Africans only* (08_HS04).

> *For my future I want it to be like okay…I want to be my own boss I want to make a big business* (08_SS10).

Some participants look forward to becoming game-changers in their own communities and beyond:

> *Maybe if I become…maybe if I become what I want to be and I have money to donate, maybe to help our people who have been in the same situation as I am* (08_SS03).

> *I'm going to change my background, my family situation of course and it means more doors are gonna be open for me more opportunities and being open. And I'll get to grow academically yeah* (08_HS09).

Dreams such as these become a strong currency that the students have and use to see themselves succeed in their studies. Baldwin *et al.* (2020, p. 21) posit that resilience could be mediated by psychosocial processes such as hope for a better future, current problems, and active coping strategies.

### Concluding remarks: key drivers for student success

Wits has articulated a clear mission to support students' access and success. The mission has moreover been enacted with the establishment of committees as well as targeted interventions dedicated to such. Thus, campus culture is being reconceptualised to accommodate students from disadvantaged communities. Student support initiatives promote students' success. At the same time, all students do not succeed. For those students who succeed, the Wits case study shows, their efforts and those of their social networks converge with institutional plans of action. Together the efforts reinforce what might loosely be termed a culture of collaboration. This confirms Ndofirepi and Cross' (2022, p.52) assertion that 'successful student epistemological access and success require effective institutional mediation strategies within a value framework of inclusion, collaboration and social cohesion to maximise the role of students' individual and collective agency.

Student participants reported a range of factors that contributed to their success. Students were motivated to enter university and succeed. Students' backgrounds provided further motivation as well as values that contributed to their success. Student participants often had to demonstrate independent learning and agency at school, having to teach themselves in the absence of adequate teaching for example. Independent learning is a skill and attitude that, when transferred to university, can be a significant contributor to success. At the basic level however, students in the Wits case study who have succeeded work hard. In turn the hard work builds confidence and further motivates them to achieve future ideals and goals.

# Chapter 8

## Student Epistemic Access and Success at a Historically Black University: The Case of the University of Limpopo

### Introduction and background

Historically, higher education in South Africa was designed and developed along racial lines. Thus, by virtue of being from an African background, normally from a rural village or township, one was classified as having come from a disadvantaged background. In post-1994, the term 'disadvantaged' has acquired an expanded meaning to include gender, geography, socio-economic status and school background. Cross and Atinde (2015) use the term 'marginalised groups'. This chapter explores student access and success at the University of Limpopo (UL). Reference is made to the pre-1994 period, characterised by segregation along racial lines. The chapter then shifts its focus to the post-1994 period of transformation, which saw various measures introduced, including legislative and policy frameworks on opening access to the higher education system. Few scholars have conducted studies of UL, formerly the University of the North, except for Nkondo (1976) and White (1997). This chapter adds to the limited body of knowledge relating to student epistemic access and success, with reference to an institution located in a rural province in South Africa.

In 1972 continuous boycotts by students at the University of the North, and confrontation with police led to the establishment of a Commission of Inquiry to investigate the underlying causes of unrest at the university (Nkondo, 1976). The main finding of the Commission was that the unrest was of a political nature. Of particular interest in the debate over epistemic access and success are the remarks highlighted by White (1997, p.99):

> Resistance to the contrary nature of the apartheid policy, resistance to the oppression of Black persons in South Africa, and to the fact that they were not even recognised as citizens in the country of their birth – discontent manifested itself at Turfloop[17] from its very inception and was to form the basis of distrust, conflict and the systematic destruction of a culture of teaching and learning.

Despite the difficult volatile circumstances under which students studied, they benefited from university education. This is evidenced by the fact that UL has made a significant contribution to South Africa's socio-economic development as its alumni have served as judges, lawyers, teachers and nurses in South Africa as well as in other countries within the Southern African Development Community.

Despite this transformation agenda to increase epistemic access of previously disadvantaged students to higher education, the student profile at UL remains predominantly from a low socio-economic status; people who come from poor families and communities, and who studies at relatively underprivileged schools in rural and township areas. Thus, students from these backgrounds are marginalised on the grounds of being black and/or being female. For this reason, the growth gains of post-1994 have not translated into jobs for these students. For many, pathways into higher education (HE) do not lead to successful completion and employment, but rather to failure and debt, therefore the widening of access into higher education has exacerbated social and epistemic injustice, compounding the frustration, alienation and disaffecection of students from

17 While the University of Limpopo was the University of the North, it was also referred to as Turfloop.

under-represented groups (Cooper, 2015). This reality, therefore, does not reflect the aspirations of the Education White Paper 3 (Department of Education, 2001, 1.27, 1.14), which seeks among others to:

- Provide a full spectrum of advanced educational opportunities for an expanding range of the population irrespective of race, gender, age, creed or class or other forms of discrimination.
- Promote equity of access and fair chances for success to all who are seeking to realise their potential through higher education, while eradicating all forms of unfair discrimination and advancing redress for past inequalities.

In the thirty years of democracy, the question of who the students from disadvantaged backgrounds are, is becoming difficult to resolve. This term carries multiple shades of meaning depending on the context under which the term is used. Traditionally, disadvantage has been defined by race. Historically, in South Africa, the term originated from educational inequalities in the education system under the apartheid era where there was unequal distribution of academic resources, including but not limited to: school funding, qualified and experienced teachers, books, and technologies to assist socially excluded communities (White,1997). The distribution was skewed to favour white children against their African counterparts. Thus, the division was mainly based on race.

The absolute alignment of race and disadvantage has now become complicated by the fact that there is an emerging black middle class that cannot be labelled disadvantaged in South Africa. Factors such as schooling and educational background (for example, quintile one and two schools, rurality and socio-economic circumstances, have of late been included as indicators of disadvantage. According to Van der Merwe *et al*. (2016), the concept is further complicated by other factors such as the emerging middle class, and the children of domestic workers, who sometimes attend good schools in the area where their parents are employed. Therefore, it appears as if the definition of disadvantage needs to be operationalised according to a specific context. Igbo *et al*. (2011) for example, in their study on an innovative, multidisciplinary strategy to improve the retention of nursing students from disadvantaged backgrounds, identified specific factors as a lineament of what disadvantaged means. They included features such as: first in family to attend college; incoming grade point average; financial needs according to federal guidelines; and nurse entrance test scores.

Contrary to the narrow view, some scholars (Badat, 2014; Cross & Atiende, 2015; du Plooy & Zilindile, 2014) explain access as a process that involves both the integration into university life and success or completion of a study programme. The UL case study subscribes to this latter view, which sees access as a process that goes beyond mere physical access or admission to a university, to one that involves integration into university life and success or completion of the programme by students who need support to succeed. Students' completion of their educational goals is a key gauge of student success (Alexander, 2007). Universities need to create conditions for students to adapt, innovate and improve all the time. Such conditions can include how to use time and money effectively and the use of people's capacity to create social connections (Hatch, 2013). The UL case study explored the conditions that allowed for student success at this institution drawing on the Capability Approach, discussed in Chapter Two, to understand the epistemic access of these students. The UL case study uses capability approach to understand how students from impoverished backgrounds cope with university life and succeed.

### Presentation and discussion of findings

This section presents the findings of the UL case study based on documents reviewed and interviews[18]. The section briefly describes the structure of learning at UL, that is, an outline of the faculties, with emphasis on the two that formed part of the case study. The section then outlines the student profile of the participants in the case study. Student achievements in the face of challenges are then unpacked. Lastly the section provides reasons for students' success at UL.

18 The purposive sampling strategy was used to select a total of 46 participants in the study. The sample was divided into four categories: students (34), 17 from each faculty. The students were labelled either Humanities Student (HS) or Science Student (SS). Each student was given a number ranging from 1 to 17 as a code, respectively.

### Profile of the faculties

UL has four faculties: Management and Law, Natural Sciences and Agriculture, Humanities, and Health Sciences. This study was confined to the Faculties of Humanities and Natural Sciences and Agriculture. The Faculty of Humanities comprises three Schools: the School of Languages and Communication Studies, the School of Education and the School of Social Sciences. The faculty offers a range of programmes leading to degrees which equip students with knowledge, skills and values needed for an ever-changing world. For example, the School of Education envisions being a leading African Centre of Excellence that produces highly skilled and competent educators of international standard in a rural setting. The faculty considers rurality as a main challenge that students bring to the university.

To understand these adversities, the capability approach is useful. Thus, the Faculty of Humanities is driven by values of care, empowerment, and development in order to accommodate these students.

The Faculty of Natural Sciences and Agriculture has four schools: School of Agricultural and Environmental Sciences, School of Mathematical and Computer Sciences, School of Molecular and Life Sciences, and School of Physical and Mineral Sciences. Of relevance, given the geographical location of the institution, is the aim of the School of Agricultural and Environmental Sciences to transform the lives of students, especially those from poor rural communities. One of its efforts to accommodate these students is to strengthen their academic skills in facilitating experiential learning and action-research.

### Students' profile at UL

The majority of students enrolled at UL, including those who did not form part of this study, come from the remote rural areas, mostly from Limpopo and Mpumalanga provinces. The students come from villages that are characterised by poverty and poor infrastructure (poor roads, lack of clean running water, no electricity, for example). Most come from households run by single mothers who struggle daily to make ends meet. The students matriculated from quintile 1 secondary schools. Quintile 1 is the group of schools catering for the poorest 20% of learners. These poverty rankings are determined nationally according to the poverty of the community around the school, as well as certain infrastructural factors. Schools in quintiles 1, 2 and 3 have been declared no-fee schools, while schools in quintiles 4 and 5 are fee-paying schools. The size of families that the students come from ranged between five and seven people per house, excluding extended families. All the students in the sample maintained that only one of their parents was a breadwinner. Due to their dire situation at home, they reported that once their household experienced financial problems, they applied for the NSFAS. This means that their family income is no more than the NSFAS threshold of R350 000 per annum. An academic staff member explained that NSFAS helps a lot of students to actually breathe and be able to focus on their studies (05_AC03).

Due to this family background, most students in the sample only experienced full exposure to internet usage, computer usage and a library for the first time when they enrolled at UL. Their schools and communities were characterised by underdevelopment and a visible shortage of infrastructure such as libraries and laboratories. However, despite this poor social background, the students possessed a rich social capital because of their culture of active participation in community activities such as politics, sports and church services. This shows that students from disadvantaged backgrounds face multiple challenges as compared to their counterparts from advantaged backgrounds.

The majority of students described above come from rural schools. In South Africa, rural schools face severe challenges that are unique to their environment. Most have poor infrastructure and a lack of resources (classrooms, laboratories, libraries, and toilets), lack of learner-support materials, lack of parental interest in children's education, insufficient funding from the state, underqualified teachers and multi-grade teaching. These are some of the barriers to effective education.

Responding to a question about the impact of high school one student, remarked as follows:

> *All I learnt about at high school is that you just have to work hard on your own because there's no one who is going to tell you do this and do that. Like make your own life goal because as I said this village is so poor, so it is up to the person whether you want to stay here forever, or do you want to go out there and experience life*? (05_SS10)

The excerpt from this science student demonstrates that while the high school conditions were not the best, it taught them that they had the freedom to pursue their goals. Moreover, the excerpt illustrates that the student could make a choice to pursue the goal of higher education or not, choosing the former. Although students were not asked about their physical health, none of the students interviewed reported being challenged physically. It is thus assumed that students had the basic functioning of health in order to pursue studies at higher education without the need of accommodations. All students interviewed were however in need of financial resources to pursue their goal of being at a higher education institution.

An academic staff member who was interviewed had this commentary about financial support:

> *Well, we had two groups. I think the current group of… they only have limited programmes. In the previous generation the pre-NSFAS… they had financial problems which affected them … and that also affects performance. And also… you can see this one is hungry in class (05_AC02).*

This excerpt illustrates that NSFAS has provided financial support to students who otherwise would not have had that support. This means that NSFAS has enhanced the capability of students to access higher education. It could be argued, however, that to the extent that NSFAS is needed to enable higher education provision for the poor, formal access is not guaranteed in South Africa given the persistent challenges in administration of NSFAS and the inadequacy of funds to meet all student needs.

Students from disadvantaged backgrounds face challenges regarding safety and security. Due to the lack of accommodation on campus, students are forced to look for accommodation outside campus where it is not always safe. When one student was asked about safety and security outside campus, she remarked as follows:

> *They [students that live off-campus] have their own social challenges, but the main challenge is … especially [for] those ones [students] that are not on campus. The issue of rapes, the issue of abuse* (05_SS11).

Living outside campus is a stumbling block to reaching or accessing facilities (library, computer laboratory, internet facilities.) on campus. However, to address these challenges, the university has provided transport and security to escort students living off campus.

When asked, one of those who used the transport indicated that the transport system was beset with a myriad of problems such as the buses being the targets of robbers, drivers not picking students up in time. However, he pointed out that there were more benefits than negatives. He contended that students could otherwise not access the facilities. Besides the issue of transport, students raised other concerns which were obstacles to a positive learning environment. One student remarked:

*… and also the residences, the issues of hot water and the infrastructure… and also, they are not enough. And I feel like there's like a lot of things… that can like [done] … so they can accommodate more students on campus* (05_HS10).

Another student said this about the campus environment:

*Okay on campus it is very much safe. It is a safe environment actually ja, as compared to off campus. Off campus there are a lot of robberies going on, students are being killed, are being raped and all those stuff. If you are on campus, then none of those you get to experience them* (05_SS11).

NSFAS does not enable the full set of functioning to students from backgrounds that are disadvantaged. At a basic level, money can only pay for both what is available and what it can afford. If there is not a sufficient, adequate and affordable supply of what is needed, whatever is available is the only alternative. Functioning is thus not only a matter of resources, but also of context. Students might have sufficient resources, due to NSFAS, to afford accommodation. However, if accommodation is not available, the capability to afford it will not result in the functioning of having a place to stay while studying.

Having a higher education institution in close proximity to one's residence appears to enhance an individual's functioning and consequently their capability and ability to generate desired outcomes. Students and some of the staff members interviewed indicated that students selected the UL because it was closer to home, which limited their financial distress. In addition, most of the students indicated that UL was the first choice because it provided a haven in many ways. Some felt that its social culture (language, food) was in tandem with their home backgrounds, and thus felt more at home than being in Cape Town, for example. In addition, some felt that UL was their place of choice because it was near their homes and therefore cheap to travel to and from campus.

One student said:

*UL is my personal preference because it is closer to home; closer to family members and all this but besides it is nice to work in a, what is it, what can I call it, is it a semi-remote or peri-urban area?* (05_HS12)

**Student academic achievement in the face of challenges**

Chapter 3 reported that, of the participating institutions, UL was one of two that declined in size between 2014-2019. The decline was due to the MEDUNSA Campus becoming a separate institution. Chapter 3 further reported that UL offered three-year and four-year B-degree qualifications, not three-year diplomas. The average throughput at UL in the Faculty of Humanities reported in Chapter 3 for the 2014 cohort was 81% and for the Faculty of Natural Sciences and Agriculture, it was 67%. The throughput for four-year degrees in the humanities faculty was 85% and the same qualification type in the science faculty, 84%. Viewing either statistic, the conclusion is that the majority of students who registered at UL in the Faculties of Humanities, and Natural Sciences and Agriculture in 2014 graduated. In other words, they achieved success.

Notwithstanding the success, academic staff (in particular) revealed that students found the curriculum to be covered in a semester too heavy to cope with, given that they were under-prepared by their secondary schools. For example, students especially those from the Faculty of Natural Sciences and Agriculture pointed out that lecturers demanded a huge amount of work within a short space of time. On this challenge

of heavy workload, one lecturer from the Faculty of Natural Sciences and Agriculture remarked as follows:

> *It is very difficult. It is very difficult. It is very confusing because it is a combination of stuff and the culture. And mostly, it is because the curriculum… you know you get it at a later stage because you missed a lot of stages. So, they have to learn a lot of things in a short space* (05_AC02).

Another lecturer from the same faculty indicated that students from rural areas found it difficult to adjust to the curriculum:

> *Most are from rural areas. Most of them are actually clueless about some of the processes we assess especially in our department. This could be defining the background of their schools and their minimal exposure to technologically related teaching and learning methods and procedures within the university environment. This might make some of the staff members to be of the view that these poor students are not serious about schoolwork* (05_AC03).

Again, it emerged from the interviews that students struggled with the use of English as a medium of instruction. A staff member remarked as follows when asked about how the use of English contributed to students' preparedness for university education:

> *I think it contributes a lot because if they are unable to correctly understand a question that actually makes them answer wrong although they would know the answer to the question. It is just that language barrier of English sometimes; I feel that it is still a challenge* (05_AS12).

Another remarked about the same issue as follows:

> *Unfortunately, you cannot teach in Sepedi or teach another language, otherwise you leave a lot of students out. But you are trying to always cover everything with English so that we accommodate everyone. But the medium of instruction I think is challenging for the students* (05_AC04).

The support staff related that the English that the students came with from secondary school was not at a high proficiency level for the students to cope with their studies with English as a medium of teaching and learning.

Since most of the students experienced freedom from their parents for the first time, some of them tended to go to the extreme. They find university life appealing and too fast for them. University life gives them freedom to engage in social entertainment including partying, which they had no freedom to do under the surveillance of their parents when at home. But they find that if such entertainment is not properly regulated, the academic pressures increase rapidly and become hard to cope with. When one of the support staff was asked what kind of difficulties, apart from academic, did she think students experienced at the University of Limpopo, she replied:

> *I think just their lifestyle adaptation. I think to a large extent actually … it is actually a problem in our institution. I think the general behaviour of students, for example, the tendency to strike and disrupt classes, we can at a certain point hamper their academic progress* (05_AD01).

One lecturer remarked as follows:

> *Most of our students are from the disadvantaged or maybe from the rural areas whereby there is no access to internet, … that they are no longer under the guardian of their parents. So, we are now experiencing freedom that they never had at home. They are experiencing too much independence and then whereby they do not think to go to classes or whatever. So though as first years, the majority of them in their first year they are a bit struggling because they are finding it difficult to strike a balance between their studies and their personal freedom (05_AD03).*

Most students come from families and schools where there are still strict moral regulations such as tight control over the use of cell phones, times to come back at home, etc. Such strict rules and regulations are enforced by dominant patriarchal and religious rules. These rules tend to be ignored by students experiencing the freedom of campus life for the first time. Students arrive at UL with financial challenges, struggle with the workload as well as language of instruction, have to adapt to a different social lifestyle with more freedom.

The remaining parts of this case study provide an explanation for the success achieved by students at UL based on what they and staff had reported. It should be noted that the academic challenges as well as the temptations that come with freedom are reported by academic and support staff only. Students did not refer to such challenges. At the same time, the study focused on students that had reached the final year and have thus achieved success. These students would thus either have overcome these or not experienced them as challenges. Academic and support staff on the other hand would be disproportionately engaged with students who are struggling to address the challenges.

### Student agency and social capabilities

From Sen's (2008) perspective agency is manifested by acts that bring about change towards the achievement of goals and values. Capabilities are opportunities and the ability to generate desired outcomes. During interviews with students it became clear that they appear to have emerged with a sense of doing what they can with the resources at their disposal. A disposition that has stood them in good stead and enabled the success.

Students describe having had values infused from family, community and faith-based organisations, on and off campus. For example, some students indicated that they were inspired by their families who inculcated values such as respect, hard work, independence and career orientation in their studies. One student (05_SS13) remarked as follows about her parents: "they always taught me hard work, patience, and compassion". Such values and other experiences worked as foundational motivation for their easier university integration. This was captured in one of the students' responses as follows:

> *Because in a certain way I come from … I took my family values and beliefs to the university and what I can say when you are in that environment you must choose the people that you want to be with* (05_HS08).

Students reported imbibing values from their communities as well as their families

> *I've learnt that you are… I believe that you are who you are because of our society, right? So, I believe everything I mean values and norms and everything we share, and we learn everything through our society and through the groups that you are living in. So, I believe the community has contributed a lot as you said where I am right now today* (05_HS11).

These two conversations underscore the importance of social interactions for students. According to the foregoing quotation (05_HS11), the student saw herself as an integral part of the community she came from. The value of "simunye" (we are one) or botho (kindness) seem to have taught the students to support one another and to seek support when needed. Forming group discussions in the lecture hall or doing group work appears an easy thing to do with this calibre of student.

From the interviews with students, it was found that values were garnered from faith-based organisations, such as the Student Christian Organisation and other religious bodies. Students reported being trained in a range of life skills including how to handle stress, teenage pregnancy and public speaking during interactions with faith-based organisations. One student made the following statement when asked what they had learnt from their faith-based organisation, 'To always be kind and humble and respect your parents and elders' (05_SS13).

The values instilled in students from family, community and faith-based organisations serve to promote a sense of 'acting in others best interest', as well as their own. This is exemplified by what one student said:

> *I was a class representative during my first year. I volunteered to be a class representative because most of my classmates had a fear of what being a class representative will cost them at the university. They said it is some difficult task so I volunteered to be one and then again while I was doing my second year I volunteered because no one wanted to and again, I was also taking part in the ICT department as a computer lab assistant. So, I was basically having two extra activities, being a class representative and being a computer lab assistant at the same time* (05_HS10).

By showing up for others and holding on to values from different social spaces, students remain grounded and purposeful actors. Students' success is valued by them and others allowing them to remain focused and determined to succeed.

**Support available at UL**

Student success at UL might be attributed to a few layers of support available at the institution. In the first instance, the institution has established specific interventions aimed at supporting students' academic practice and general wellbeing. Secondly, there are faculty level support interventions with similar aims. Lastly, students have organised themselves in social groupings on campus that offer spaces for enhancing their well-being as collectives.

The university has initiated several programmes to support students' achievement. At the beginning of each year, the university conducts a one-week compulsory freshmen orientation with all the newly registered first-year students. This programme is meant to familiarise the newly admitted students with all the university departments, rules, values, goals, mission, and the key staff. This was brought to light by one of the Faculty of Humanities staff members:

> *The academic support is well-provided. Although we have tutorials, they are not enough to cover all modules. According to me, we lack the part whereby we can give it to students – those who feel like they are falling behind in the academic side. But from the administrative side everything is in place. We have got administrators who are in the school throughout the year, and they give anything that the students need. Our offices are always open. And we start supporting them from the beginning when we give out their orientation. And then when you move out to where we distribute and talk to them from the school side rules and everything* (05_AS03).

A Faculty Administrator had this to say:

> *But in terms of administrative action, I can say it is because the students are well-guided through their orientation from the beginning. When the students start from the university they are orientated into their own programme. And their rules, the general university rules are more clarified to them. Even when they do their registration - so they are guided according to their module selection and everything and then therefore during the course of the year if ever we see that this particular student they are at risk in terms of their marks or whatever, when we can see that this student is at risk and then we call the student. We identify the student and call them that you know what pay attention to your academic work … if the students, what can they say, when they do open up then maybe they explain their challenges or whatever and then we refer them to the other section of the university just like counselling in D block I don't know what they call it* (05_AD03).

Regarding resources, the university makes available several resources such as computer laboratory assistants to help the students in their use of the computers. Although some of the participants lamented the state of the computer laboratories, they seemed happy that they have them. In addition, we were made aware that the university through the ICT division, offer computer literacy classes to all first-entering students across the campus. Below are the views of the participants with regard to this issue:

> *In the computer labs there's actually there's people who assist those which cannot access or don't know how to use the computer. They are the ones who help* (05_AS02).

From this it can be inferred that adequate technology and support in its usage, might be one of the reasons for the success of UL students. When the student was asked what technological support she received from the university, she stated that she was supplied with a laptop and that there were also computers from the computer laboratories on campus. From this answer, one can deduce that the university has attempted to close the poverty deficit to ensure that all students are on par. The supply of laptops and mobile data bundles proved particularly useful during the Covid-19 pandemic, especially for students whose parents could not afford to equip them with laptops.

The Faculty of Science and Agriculture, which has seen an upsurge in enrolments, including female students, has put in place support systems. This growth has led to increasing calls for a focus on student support especially for those who come from disadvantaged backgrounds. Mentoring and tutorials are part of the first-year programme which were predominantly implemented in the Faculty of Agriculture and Sciences. This was found to be helpful for students who were struggling with their studies. The lecturers had this to share about this programme.

> *Yes, we have tutors. For every course there's … a lecturer going to the class and teach and there are tutoring sessions where you come and sit with the students with the help of a postgrad… in that way postgrad especially those ones who are on Ph.D. levels… they come and assist with the concepts. They assist the lecturer; they address issues one by one. They go bench by bench talking to the students giving them some extra assignment and clues … helping them with everything that they need to help with. That's one of the things that we are actually doing in the department* (05_AC02).

The unique UL campus culture of communal life, where students eat in groups, attend religious services, such as the Student Christian Organisation, which is dominant, the Zion Christian Church Choir and other clusters, provide a unique culture that is not found on many campuses in the country. Students from disadvantaged backgrounds who join and interact in these groups might derive support and social engagement in addition to the values which are taught. This means that faith-based organisations serve to foster specific values in students and provide social support. In other words, the faith-based organisations practise what they preach. In addition, UL has a vibrant student social life in politics and sport. These and other social activities serve as breathers from the stressful academic life.

Students are thus not confined to the academic life of the institution, the social domain at UL is rich with faith based and physical activities that add to their opportunities and ability to generate desired outcomes.

## Conclusion

The UL case study points out that students in the humanities and science faculties achieve success in the form of throughput despite limitations of their context. Their capability is however bolstered by values derived from family, community and faith-based organisations as well as supportive interventions at the institution. These findings have exposed the limitations of the deficit model that reinforces a perception that students from disadvantaged backgrounds are failing at universities. This study has found that despite their impoverished backgrounds, many of these students succeed. Some of the key challenges students have sought to overcome include the adaptation to a life of independence and freedom, given that many come from cloistered rural home environments characterised by tradition and discipline, safety and security for students living outside campus, and language and school under-preparedness challenges.

This chapter has drawn attention to the legacy of listening to the voices of the disadvantaged students and how they understand their own experiences of university life. It is hoped that the stories presented here, though not generalisable to a wider population, point to some of the transformative agenda in the South African Higher Education system and can inform critical pedagogies, community partnerships and schooling and the importance of social-cultural learning. The study reveals that when students receive adequate support, including from student organisations, they can succeed at university. This study reveals that the capability to achieve success is not limited absolutely by limited resources. Although resource limitations impact on opportunities, the limitations also provide opportunities for individual students to act collectively to generate desired outcomes. Staff narratives do however seem to be misrecognising the students' success and focusing on those who experience challenges and require support. A more balanced engagement by the staff of UL might lead to more nuanced support interventions that focus on bolstering student capabilities as opposed to filling gaps that supposedly exist.

# Chapter 9

# Student Epistemic Access and Success at a Historically Black University: The Case of the University of the Western Cape

## Introduction and background

The University of the Western Cape (UWC) was established in 1960 as a predominantly undergraduate teaching institution to train 'Coloured' professionals to work in the racially divided school system, health system, civil service, social work, economy and recreational areas, covering all aspects of life. Unintentionally, the academic programmes designed to create passive racially defined professionals – docile bodies of apartheid ideology – also sowed the seeds of resistance among many UWC students.

By the 1980s and early 1990s UWC had become well known for resisting its official script. At the same time, a romanticised view of UWC students and staff as a homogenous and unified group opposing apartheid must be guarded against. While UWC as a participatory institution may have been the formal model at specific times in its history (parts of the 1970s and 1980s), its civic culture reflected elements of the inherited colonial, patriarchal, heteronormative, and authoritarian institutional culture, the ideological orientations of its members and competing interests. Findings suggest that these elements of the inherited institutional culture somehow manage to endure in the fabric of the institution, to influence everyday social and academic practices and relationships.

## Competing understandings and frameworks of access to education

Morrow (1994, p.43) acknowledges, on the one hand, that academic practices "are themselves aspects of the framework which serves to maintain relations and structures of oppression and domination in society". At the same time, he seems to cast academic practices as neutral non-ideological tools:

> The skills, materials and tools of building might be used to build either torture chambers or schools, but the fact that they can be used to build torture chambers is no reason to throw away those skills, materials and tools. Similarly, that academic practices can be misused to serve sectional interests is not any reason to think that this is an inherent feature of academic practices as such, rather than a corruption of those practices. … Can it then be the case that academic practices as such serve to maintain asymmetrical relations of power, in short, that they are ideological? … Academic practices do not rest on substantive foundations, immune from revision, nor are they bodies of "content". Academic practices are disciplines in terms of which it is possible to think rigorously (Morrow, 1994, p.44–45).

Academic practices are shaped by historical power relations around who is taught, who teaches, what is taught, how it is taught, in what language it is taught, who decides and using what criteria. It is, therefore, possible to argue that by underscoring the power dynamics shaping academic practices, gaining epistemological access helps to challenge the dominant techno-corporate models of higher education change or constructions of students in terms of deficit. It, therefore, becomes necessary to distinguish between different ways of understanding access to higher education: as an unproblematic integration into the existing university space, or as influencing the nature of the space itself.

Alternatively, when contemporary struggles and contestations in the university space can be taken as the analytical starting point – instead of academic practices viewed as neutral – then at least two competing theoretical approaches to understand epistemic access become visible.

On one end of the spectrum, a liberal framework views access as assimilation into the mainstream of the existing university space, viewed as neutral. At the other end, a view of educational institutions as non-neutral terrains of struggle.

Critical frameworks provide the conceptual tools for a more rigorous analysis of epistemic access. They consider access to higher education in relation to historical exclusions – of people, of knowledges, of languages. In South African higher education, due to, for example, deliberate policy choices, or specific understandings of 'quality', these promote a deficit conception of self among young first year students. Importantly, an intersectional analytical lens offers a useful alternative to the "barriers to learning" discourse.

Hence, crucial to the research project leading to this chapter was to explore and open up for discussion the terminology and language we use to describe students and institutions. For example, historically, university admissions policies required that applicants be systematically included or excluded from a university's applicant pool on the basis of their apartheid race classification before their academic achievement and preparedness was considered. Inclusion and exclusion, in this case, was on the basis of an education policy, and not on the basis of academic preparedness. Consider a second example, UWC is sometimes framed as a "historically disadvantaged university" which opens the debate on what is meant by, and who is seen as disadvantaged. Does 'historically disadvantaged' translate into 'continuously disadvantaged'?

Terminology such as 'disadvantaged' and 'marginalised' may take on different meanings in different university contexts. Spivak (1993) questions such 'clinging to marginality,' provoking us to ask: In what ways do we as researchers internalise the construction of 'marginality'? What does 'marginality' mean in the seeking of academic validation and recognition? How can 'marginality' be differently experienced and interpreted (for example, when analysing interview transcripts). Similarly, the study interrogates the concept of 'epistemic access' in relation to 'epistemological access' (Morrow, 1994). As noted by Mirza (2009), the politics of recognition enabled those who had been marginalised to find a voice. It is liberating but not without its problems. It has been translated into a bureaucratic approach to diversity which monitors our progress and tracks our differences. Good intentions remain locked in an institutional paper trail (Mirza, 2009).

Critical approaches (see CHE, 2010, p.178-181) also emphasise the extent to which institutions themselves change as they grapple with competing policy imperatives: of redressing historical imbalances, teaching democratic citizenship, and teaching skills for the global ICT-driven knowledge economy. Understanding access and success in higher education, in this view, requires attention to the material and cultural dimensions of the intersecting factors influencing academic performance. This requires simultaneously analysing physical access (addressing issues of redistribution and the political economy of higher education) and epistemic access (addressing issues of recognition and the cultural politics of higher education).

This intersection of redistribution and recognition provoked the student protests in 2015 and 2016. The #RhodesMustFall (#RMF) protests were about issues of recognition and the cultural politics of higher education involving questions of decolonising education and society. The #FeesMustFall (#FMF) protests included the prior question of democratising physical access, which requires attention to the political economy of higher education of fees and funding. The #FMF protests insisted on a critical recognition that refuses to understand decolonisation independently of issues of democratisation and redistribution.

The metaphor of the gate captures the combined framework for thinking about formal and epistemic access at UWC. To illustrate how this metaphor works to simultaneously include and exclude, consider the example of UWC's once vibrant part-time programme as a key strategy to expand access to higher education. Let us consider UWC as a gateway. Historically, UWC planned and offered part-time classes as part of its flexible teaching and learning arrangements and the ethos of lifelong learning which prevailed institutionally into the 2000s (Division for Lifelong Learning (DLL), 1999; Watters, Koetsier & Walters, 2003).

Staying with the metaphor of the gate, in which sense may the University be regarded as a gatekeeper of physical access? It may be possible to think of teaching and administrative staff at the University as simultaneously gateways to and gatekeepers of institutional access, especially as multiple and contested understandings of epistemic access exist at the institution.

In the space between gateways and gatekeepers, it would be worthwhile to know from teaching staff whether they thought the university is currently trying to find ways of both promoting its legacy and promoting new institutional pathways, and whether institutional debates currently lean more towards cutting new paths rather than being at a crossroads. Lecturers' reflections on when they perceived themselves as institutional gatekeepers and institutional gateways in relation to epistemic access could directly shed light on specific teaching arrangements, including curriculum matters. Presently the university embraces lifelong learning as part of its mission statement and commits itself to the flexible provision of programmes and courses. Interestingly, while lifelong learning is considered an important attribute of a UWC graduate, a current unknown seems to be: what are the kinds of lifelong learning conversations currently taking place at university, and how are teaching and learning arrangements informed by seminal institutional texts in this regard? What kind of lifelong learning is being promoted institutionally, and how does it inform epistemic access?

Intersectionality, as an analytical tool or lens identifies how intersecting power dynamics around race/ethnicity, class, gender, nationality, sexuality, age and other axes of exclusion work to shape social relationships and are "interrelated and mutually shaping one another" (Collins & Bilge, 2020, p.4). Collins and Bilge note that that intersectionality also connects local struggles with struggles elsewhere. As an example, the #RhodesMustFall (#RMF) and #FMF student struggles could find intersections with the #BlackLivesMatter protests in the United Kingdom and United States of America.

When a university curriculum challenges already embedded notions about race and society amongst undergraduates, for example, it can have three effects. It affirms what some students already know (e.g. that race is a construction), it evokes resistance (e.g. that there are races and that they are different, end of story) and it troubles familiar knowledge (e.g. that maybe what I know about race could be wrong). The pedagogical task is not to provide students with "the right answers", but to enable them to question cherished knowledge and to revisit those certainties about race, science and society (Jansen 2020, p.14).

### Cultural politics of epistemic access at UWC – Pathways through the academic pipeline

The Post-School Education and Training Monitor (DHET, 2021) reports that average graduation rates in South African public universities remain low, increasing from around 17% in 2010 to 21% by 2019. Here, graduation rate is calculated by dividing the total number of graduates by the total number of enrolled students (DHET, 2021) as opposed to the graduation rate of a particular cohort which Chapter 3 analysed. Unfortunately, UWC did not avoid this disturbing trend. The Academic Planning Unit's cohort analysis of the time-to-degree of the first-time entering students into selected three-year Bachelor degree programmes in 2018 (the faculty and programmes are not specified) found that by 2020 only 26% had graduated on time, 47% were still in the system, intending to complete their degrees, and 28% had dropped out (Academic Planning Unit (APU), 2022, p.19). By 2021 the corresponding figures were, 26%, 45% and 30% respectively. Almost half were still studying, and fewer students had graduated then had dropped out. Given past patterns identified by Breier (2010) and Mohlakoana (2015) on students who drop out or change programmes, it is likely that some may have changed their course of study, or stopped out and were planning to return at a stage to complete their degrees.

The problem of academic underachievement in South African higher education, or at UWC, is not a new phenomenon. In fact, it has been a persisting pattern since the 1990s. In the early 2000's the UWC Institutional Operating Plan (UWC, 2004, p.36) expressed concern with the "low throughput, prolonged time-to-degree and high attrition rates" of undergraduate and postgraduate students. A few years later, the Academic Planning Unit's analysis of the time-to-degree for the UWC 2010 first time entering cohort again found that "undergraduate student performance at UWC is characterised by low on time completion, high attrition and delayed completion. … The data … for Foundation programmes presents an even bleaker picture" (UWC, 2017, p.8-9). More recently, the UWC Retention and Success Document (UWC, 2019) acknowledges the scale and persistence of the problem:

> Our retention data show that on average UWC loses around 20% of students by the start of their second year; and an additional 20% of students in the following two years. Our success data shows that on average, at UWC, less than 25% of an average three-year degree cohort completes within regulation time; while a total of 50% drop out. By graduation time, which is the third year of a three-year degree, we would have lost significantly more students (40%) than we graduate (24%). . . . We also know that around 80% of students who do not return at the start of their second year, leave UWC despite being academically and financially able to register for a second year of study (UWC, 2019, p.2).

As shown in Chapter 3, for the UWC 2014 first-time entering cohort, 21% of students registered for three-year undergraduate degrees had graduated after three years, increasing to 49% graduating after five years of study. Chapter three reported that UWC offered three-year and four-year B-degree qualifications, not three-year diploma qualifications. For three-year B-degrees, UWC was shown to have the lowest throughput of participating institutions. For four-year B-degree, the lowest throughput amongst participating institutions were Wits (57%), UJ (59%), UP (60%) and UWC (60%). Thus, although UWC was not the lowest for four-year B-degrees, it was lower than the national throughput for four-year B-degrees (67%).

Chapter three reported that the average throughput at UWC in the humanities faculty for the 2014 cohort was 46% and the science faculty was 56%. This is lower than the national average for three-year B-degrees (60%), four-year B-degrees (67%). Unlike most of the other participating institutions, many students who registered at UWC in the humanities in 2014 did not graduate. Most students in science faculties who registered in 2014 did graduate.

Module pass rates are a lot more positive. Using the example of 2020, the science faculty taught 134 modules. The pass rate for most modules was over 75%, with several over 90%. Only twelve modules had pass rates between 60% and 74%, and one module had a pass rate of 48%. This was a small class with about forty students. The large classes had pass rates between 78% and 98% (Institutional Planning Office, 2020). The Arts and Humanities Faculty taught 231 modules in 2020. Most module pass rates were also over 75%. About forty modules had pass rates between 55% and 74%. One module had a pass rate of 39%. Two modules, each with one and two students, had a 0% pass rate. Five modules with pass rates less than 70% were large first or second year modules, with more than 300 students (Institutional Planning Office, QA, 2020).

Does the deficit logic around the idea of an 'extended' curriculum and "ECP student" label which many students carry with them throughout their academic lives, play a role? Alternatively, it may also be related to students being stuck in the system, at the academic-administrative interface. For example, it seems that students who change their programme of study, or who stop-out, are counted under the category "drop out". Other factors involve students who work full-time, but also enrol in a full-time programme to access the residence.

A parallel explanation could be that the same students are not failing in all modules. This would mean that students that are failing are not all failing the same modules. Modules are also year specific. This means that by the time students move from first to second and then third year, the bulk of students who are not passing have done so in first year. Even students in first year might have dropped out by the time they would have impacted on the pass rate of the module. The contradiction points to the need for more detailed and systematic quantitative and qualitative cohort analyses which tracks students from registration, through participation in various modules to eventually passing, failing or dropping out. Neither scholarly work nor grey literature reporting on this seemingly contradictory phenomenon could be located. Irrespective of the explanation for the phenomenon and although the throughput is not high, there are students who do succeed. This is particularly illustrative from module pass rates and the core focus of this research. An explanation for students' success at UWC is proposed below.

### Coalescing explanations of student success at UWC

Formally accessing higher education depends on many intersecting psycho-social, historical and institutional factors peculiar to specific contexts. These include students' pre-university interest, motivation and preparation, universities' admissions policies and choice of 'feeder'

schools, sustained resources for undergraduate programmes as well as national and institutional policies and innovative strategies to fund students, from full scholarships to tuition waivers, work-study programmes, internships, fees on a sliding scale and tax rebates on fees. In this regard, UWC prides itself on its equitable access policy, its relatively low fee structure, its once booming part-time study programme and the numerous funding options for students, despite the fluctuating state subsidy.

UWC remains committed to the widening and broadening of access to higher education. However, we recognise that students entering university come from very different and unequal schooling environments and, in general, there is a lack of academic preparedness for university studies. These factors have a direct influence on student retention and success. We will continue to make every effort to find effective ways to address the articulation gap between school and university studies. This will include renewed attention being paid to improve the provision of quality extended curriculum programmes, along with information literacy, computer, and e-literacy skills (UWC 2021, p.24).

This excerpt from an institutional report demonstrates that, like other participating institutions, UWC recognises its role in providing formal access to students in a highly unequal society. The institution, like others, expresses a commitment to doing what it can to ensure that as many students as they can enrol gain formal, physical access and that as many of those students as possible attain academic success, at least one measure of epistemic access. Institutional commitment to student success is thus one explanation of student success at UWC.

The APU undertakes constant reflection, discussion and vigilance – like the constant gardener, or Schon's reflective practitioner – of academic practices at programme-level, to follow individual students' pathways through the academic pipeline:

> Therefore, our concern must not be directed only at students who drop out at first year, but also for those who continue without having performed well enough. Our promotion codes clearly mask the first-year problem; and when these at risk students are allowed to proceed while carrying 1st year modules, we may be setting them up for failure when, in the interest of progression, we allow them to take credit loads which may be unmanageable (UWC APU, 2017, p.7).
>
> The APU will continue to provide similar cohort studies for subsequent cohorts, and will disseminate findings to faculties through regular Faculty roadshows in order to direct attention to the dire need to understand the patterns of retention and success in the University and to persuade all of the need to direct our intentional action to improving student retention and success for our undergraduate students (UWC APU, 2017, p.9).

The focus at UWC is simultaneously on student retention and on-time graduation (the pipeline metaphor is helpful to understand this process), as well as on the quality and rigour of engagement in individual courses of academic programmes and courses. In this process, the agency of staff to engage with, and not lose touch with, individual students in their intellectual journeys from their first year to their graduation. This approach may be the beginnings of a deliberative model of academic engagement around students' epistemic access. It is evident in the supportive networks around the work-study programme, and in research that moves beyond the "barriers to learning" discourse, and towards building academic community focussed on student success.

Institutional interventions offer further evidence for the UWC's commitment to student success. Amongst these are three mentorship initiatives; First Year Transition Programme (FYTP), First Year Experience (FYE) and Academic Excellence Programme (AEP). The FYTP and the FYE aim to motivate, support and integrate first-year undergraduates into the social and academic life of the University. The third, the AEP is a leadership series mentoring second year students through monthly lunchtime meetings and a residential module once a term (UWC, 2019, p.6).

In addition to overarching institutional interventions, specific faculty level interventions might be contributing to student success as well. Tutorials form the core part of faculty level interventions. In both faculties, most large first year modules offered tutorials. A few second and third-year modules also offered tutorials, although the criteria for the allocation of tutors was not too clear. In many modules, a small percentage of the total module marks is allocated for tutorial attendance and tutorial exercises, to encourage students to attend and participate. Most student respondents felt that tutorial attendance was usually good and appreciated the opportunity to revise key concepts and readings discussed in lectures, or, in some cases, the opportunity to catch-up with lectures they had missed. Many students reported feeling relaxed, comfortable, and enjoyed the discussions with their tutors and the other students in their small tutorial groups. Faculty interventions could thus be contributing to student success at UWC.

In addition to the broad institutional and faculty commitment to student success, evidence was found of staff commitment to student success at UWC as well. Students generally interact with a range of staff around teaching, research, and administrative student support related queries or issues. Interactions in lectures often depend on the size of the module. In 2020, about ten courses (modules) in the science faculty had student numbers over 300; with just over 900 students in the largest class and about 550 in the second largest class. The Arts and Humanities Faculty had over thirty modules in which student enrolment was more than 300. The largest classes had 820 students, followed by about six courses with 700 to 800 students. Both faculties also had many small classes, making it easier, in theory at least, for lecturers to make a connection with individual students. A respondent from the science faculty noted that many lecturers encouraged students to participate in class, and often called upon individual students, by name, to answer a question in a lecture or laboratory session. The efforts of committed academic staff are another part of the success narrative of students at UWC.

Data shows that students' perceptions of their interactions within the institution as well as the institutional space is positive. Most respondents described their experiences and interactions with other students and staff as generally pleasant and respectful. They experienced the campus environment as safe and friendly, and many found it easy to fit into the university community. Some mentioned the improvements they noticed in the campus physical environment since their first year of study. Changes included building renovations, improved residence entrances (new locks), new traffic lights and security cameras, special provisions for people with disabilities (ramps for wheelchair access), and improvements in social, sport and other recreational activities facilities. In other words, students who have achieved success experience UWC as a generally pleasant and comfortable space to be in. As such, this could offer further explanation for students' success.

The positive perception of UWC by students extended beyond the academic and physical space of the institution. Outside the lecture space, social, sport and other recreational activities build friendships and campus community. These activities, as well as membership in student organisations, clubs and societies, are spaces for understanding the 'other'. They allow students to connect with each other around different identities – for example, as a history society member, debating society member, soccer club member, or member of a volunteer programme or a specific project – than their perceived differences, allowing new common identities to emerge, and a chance to flourish. They also create awareness of campus resources and other activities by circulating information among students and play a positive role in dealing with and overcoming personal challenges while on campus.

Some students in the science faculty complained that their almost full timetables leave little space for extracurricular activities on campus. For many years the lunch hour was used as an undergraduate lecture period. In 2020 UWC reinstated the lunch hour for students. Many sports and student societies organise activities during the lunchtime period. It is often the time when off-campus and residence students connect, across their many differences, socialise, find commonalities, have fun, form life-long friendships, and even fall in love. When data for this case study were gathered, students would not have been able to assess whether the lunch hour facilitated further positive perceptions of UWC and their capacity to succeed, given that they were not on campus because of Covid-19 restrictions. The extent to which the campus environment, including the capacity and opportunity for students to participate in extra-curricular activities, contributes to student success not only during the time at university, but also post-graduation requires a lot more intentional research.

Participants' reports show that opportunities for students to gain, if not academic success and epistemic access but, the skills and disposition to achieve such success, are critical. Students who joined volunteer programmes on campus, for instance, found these spaces to be empowering catalysts for self-discovery. This in turn can have a positive impact on their relationships with each other and with the institution. For example, several students interviewed knew about and formed part of the programmes at the Gender Equity Unit on campus. They saw this as a safe space where students who identify with non-normative gender identities and sexual identities have a place which they deeply value and make connections. Participation in other campus activities may improve their academic work, students also get exposed to opportunities to develop a sense of social and political responsibility outside their academic experiences, which can serve society through community development work. Thus, the opportunities available to students at UWC wherein they can both connect to less mainstream forms of identifying as well as make societal contributions could be offering students both inspiration and motivation to succeed.

### Insights from the UWC case study

The UWC case study proposed viewing epistemic access in at least two ways. The first, emphasises the efficiency of student pathways through the academic pipeline, and involves questions about access and success. In this regard the UWC case study found factors contributing to the explanation of why students achieve academic success at the institution. These include institution, faculty and academic staff commitment to student success as well as students' positive perceptions of the campus. Positive student perceptions included social interactions as well as opportunities for personal empowerment and contributing to social development. As noted throughout the report, the study was not able to determine which of these make more or less of a contribution to student success or whether one or the other is more central than the other. How exactly they intertwine or weave together to ensure students' success can thus not be extrapolated. Further research into students' academic success could thus be more intentional about which factors contribute to students' success and under what conditions.

The interaction of these factors with specific challenges that students might or might not have experienced could also not be drawn out in the case study. Future research might thus consider a more targeted sampling strategy which track students' academic success quantitatively, followed by identifying specific challenges and then examining the specific interventions which contributed to their success qualitatively. Alternatively, impact evaluations of specific interventions could also provide valuable insights into more detailed explanations of students' academic success.

Clearly then this study was limited in its explanation of the epistemic access and success at UWC in particular and higher education in general. At the same time, the case study contributes to understanding student success in South African higher education institutions. The limitation of the study is even starker when the second manner of understanding epistemic access is viewed. In other words, the knowledge quest, especially contestations around the relationship between excluded and included bodies, knowledges and languages in higher education curricula did not emerge from this case study. Students did not provide data either confirming or contesting what is taught, how it is taught, who decides, and using what criteria. In short, questions around decolonising the curriculum. In this instance too, the research design could have limited articulations of knowledge. Further targeting research towards programmes and modules or courses could provide explanations for the knowledge questions related to epistemic access and success in higher education. Research designs would also need to be more participatory and positioned historically in order to determine shifts over time. Indeed, research designs interrogating knowledge would have to consider alternative units of analysis; course documents as opposed to students for instance.

# Chapter 10

# Towards a Capability and Resilience Model of Epistemic Access and Success of Students from Historically Disadvantaged Backgrounds in South Africa

## Introduction

This chapter provides a synthesis of the main themes and challenges of epistemic access and success for undergraduate students from historically disadvantaged backgrounds in the Faculties of Humanities and Natural Sciences, drawing on the six university case studies. Overall, the data suggests that students' epistemic journey is a function of their integrated, co-created experiences comprising student agency and institutional mediation activities. While student responsibility and agency emerge as critical, the evidence points to the crucial role of institutional mediation or capability in the official and pedagogic domains, with the social domain of student life emerging as quite significant, the domain that requires far greater attention than has been the case in the past. Several important themes have emerged from the data, notably, student under-preparedness and the school-to-university knowledge gap, the continuing importance attached to academic development (AD) programmes, the notion of 'compensatory capital', the 'NSFAS funding dependency problematic', first-generation status pressure, the curriculum status of African languages and, not least of all, student resilience. Social domain themes include: accommodation, linked to transport and security concerns; social connection or belonging, linked to institutional culture; mental health issues and the importance of extra-curricular participation; and balancing independence at university with academic work.

Across the case studies, a key problem identified, and one that has persisted in the democratic era in South Africa, is the articulation or knowledge gap between the school to university transition, linked to student under-preparedness. This has impacted student access and success especially in their first year of undergraduate study. Linked to the knowledge gap, is that if English remains the medium of instruction at universities without African languages also accorded this important pedagogic function, many historically disadvantaged African students will continue to struggle in achieving excellence in their academic work. While learning in one's own language has huge advantages, language research relating to student epistemic access, point to a multilingual language-in-education policy approach, taking account of local context and history, and especially the unique demands of academic literacy. Boughey and McKenna (2021), for example, suggest that regardless of what language students are taught in, they can fail or succeed. They further contend that "when students are not familiar with academic contexts, even if they are aware of the rules of spelling, grammar and punctuation, they can still make inappropriate choices' leading to failure (p.61). Therefore, knowing a language's rules (even a home language) does not obviously lead to academic success. Universities must focus on other factors that contribute to failure rather than ride on the 'language problem' as a perennial excuse. In this regard, it might be useful for future studies to explore more closely the link between student drop-out rates and the various curriculum challenges encountered, including the language policy debate.

While students' capability and responsibility accounts for much of students' success and throughput, institutional mediation, especially through academic support, continues to shape the quality of students' academic experiences and associated outcomes. Cross's notion of 'compensatory capital' (2018) emerges as an important part of students' capabilities; however, there are indications that the peer, family and community support networks that students rely on are coming under increasing pressure in the face of rapidly changing university environments which reflect the challenging and dynamic social and economic contexts of 21st century societies.

The notion of 'super student' (demanding superhuman efforts to cope) emerges as an important facet of epistemic access and success, thereby drawing greater attention to the notion of 'student resilience'. An important finding relating to students' epistemic access is the 'NSFAS funding dependency problem' or what might be referred to as the 'constant precariousness of formal access'. Data from most case studies highlight the persistent material and financial difficulties students encounter despite NSFAS funding – many students struggle to make ends meet and are constantly worrying about whether the NSFAS funding will reach them on time. It would appear, therefore, that the constant struggle to hold on to formal access is having a deleterious effect on student participation in academic practice, shaped also by continuing challenges around the issues of race, class and gender.

As highlighted in chapter two, invoking a decolonial theoretical lens foregrounds the need for epistemic justice in respect of disadvantaged students. However, data from the case studies suggest that the focus on decolonialism is often a mere distraction for students; and that the real challenge around epistemic access and success is how best to come to terms with the traditional Eurocentric curriculum, while gradually adapting to decolonial curriculum imperatives. In some ways, student epistemic access and success has been enhanced because of the turn to digitisation; on the other hand, it has highlighted persistent inequalities of South African higher education provision. The analysis and discussion that follows interrogates the data from the case studies more closely.

### Institutional mediation

When historically disadvantaged students enter university for the first time, they are confronted by a complex socio-economic and institutional cultural edifice. This complexity has been explored through three lenses or domains: the official, pedagogic and social domains. For the purposes of analysis, academic development (AD) programmes are discussed under the official domain, although they overlap considerably and are both directly and indirectly related to the pedagogic domain. The third important domain, which seemingly has not received as much emphasis in epistemic access research, is the social domain, as is apparent from the findings of this study. It should also be noted that this report encompasses six case studies, with diverse institutional contexts. In particular, the distinction between historically white institutions, such as Wits and UP, and the historically Black institutions, such as UL and UWC, is pertinent, as is the context and academic focus of CUT as a university of technology. UJ presents another unique institutional context, given its merging of a formally white Afrikaans-medium institution, with a technikon and a black distance learning entity. Notwithstanding these differences, the synthesis that follows identifies several common threads that have a bearing on historically marginalised students' epistemic access and success.

### Official domain

This domain addresses the official recontextualisation field following Bernstein (1990), which draws attention to the construction of new knowledge from previously dominant discourses of knowledge production. In South Africa, recontextualising of the official domain has entailed confronting the issue of exclusion of historical social groups, to consider diversity, social justice and equality. One important way in which the institutions in this study deal with this fundamental historical challenge of marginalisation is through AD programmes, which is also a way of dealing with the ongoing knowledge gap school-to-university transition challenge. Cross (2018) added that the official domain includes the policies, rules and guidelines regulating campus life, or the institutional facts and constitutive rules known as institutional culture. While policies, rules and guidelines were not reported on during interviews, reference to documentary evidence illustrates that this is not an absent feature of universities. Among the most important AD programmes that impact student access and success positively are writing centres, tutoring and psychological support services across the institutions. There are unique AD institutional initiatives, such as UP's PUA, which since 2021 has offered academic literacy, numeracy and other academic skills development courses for high school learners; CUT's Student-Peer Mentorship Programme where students are supported by their peers using mother tongue if necessary as critical to bridging the gap between home language and English; and Wits University's First Year Experience Committee to address student issues of transitioning from school to university. Overall, institutions provide a range of AD programmes based on institutional need and resources, as illustrated in the case of CUT: Student-Peer Mentorship Programme, Supplementary Instruction (SI), a project on the Scholarship of Teaching and Learning, Graduate Attributes (GA) Project, Academic Advising, the Writing Centre for undergraduate students, ECPs, the Mentorship Programme for New Academics, and a year-long training and development programme.

## Pedagogic domain

Structurally, the pedagogic domain of universities is demarcated by faculties offering a degree or qualification and setting their parameters; that is, the admission requirements of who gains entry, and the curriculum content and who teaches it. From a curriculum and teaching perspective, the following themes on student experiences were highlighted in the case studies: study workload, rural specific challenges, language issues and academic literacy, use of tutors, computer literacy and the turn to online/blended learning, shyness and lack of confidence, class size, applied/technical skills vs conceptual knowledge, student-centred approach (SCA) and having a sense of belonging.

With regard to workload, despite, or maybe, because the participants in this study had succeeded in the academic programme, they concluded that the workload of the programmes was quite heavy. This is one of the recurrent themes in case studies. One lecturer from the science faculty at the UL remarked as follows: *It is very difficult… very confusing because it is a combination of stuff and the culture. And mostly, it is because the curriculum… you know you get it at a later stage because you missed a lot of stages. So, they have to learn a lot of things in a short space* (05_AC02).

Similarly, many students, particularly those from the science faculty at UJ, felt that their workload was too heavy: *UJ is all about studying and being serious* (03_SS03), *I am always in my room doing my schoolwork* (03_SS09), *barely have time for lunch* (science administrator). Another lecturer from the UL indicated that students from rural areas found it difficult to adjust to the curriculum: *Most are from rural areas. Most of them are actually clueless about some of the processes we assess especially in our department. This could be defining the background of their schools and their minimal exposure to technologically related teaching and learning methods and procedures within the university environment. This might make some of the staff members to be of the view that these poor students are not serious about schoolwork* (05_AC03).

Here again, rurality emerges as a factor in accessing the university. Within this context however, it relates to the pedagogic domain of the institution. Students from rural areas are not regarded as prepared for the university environment due to their lack of exposure to technologically orientated teaching and learning. The excerpt here does, however, not match with the data on positive throughput trends, and thus adds credence to there being a disconnect between the orientation of lecturers and what students are achieving. Alternatively, lecturers might be focusing their attention on weaker/struggling students only, while being oblivious to successful students. Or this awareness has led to interventions that help students to overcome the challenges. It might be that a closer look at the curriculum and its delivery, including assessment practices, are required to elicit a deeper understanding of the implied academic complexities.

The teaching and learning challenges associated with language and the medium of instruction are a common theme. However, the language policy and reforms at universities to date have remained stoic and at a cosmetic level. Indigenous languages have not developed sufficiently to become the language of teaching and learning, and English continues to enjoy that role. This is regarded as a major obstacle to both advantaged and disadvantaged African students at African universities in general. The language conundrum was expressed as follows in the Wits case study: *Coming to university, the first difference that the students noted was the dominance of the English language as the medium of communication. For most of these students, the thought of communicating in English was a daunting task.*

UP has been making efforts to address the language-in-pedagogy challenges, given its unique history as a White, Afrikaans-medium institution. This has been done through the phasing out of Afrikaans as a language of instruction and adopting English as the only language of instruction. Online Sepedi courses are offered to staff and students free of charge, to encourage multilingualism and social cohesion. At CUT, academic literacy is seen as an indispensable tool in negotiating epistemic access for students. In particular, the institution observed that a large number of students, irrespective of their level of achievement in high school, are generally not sufficiently equipped in academic English language proficiency and personal competencies (life skills) to successfully pursue studies in higher education. Based on the evidence from the case studies, a study that scrutinises curriculum delivery should have a particular focus on language in context, including the translation of course material into African languages and the cost implications.

Some research relating to the language question, however, suggests a nuanced approach is warranted. According to Boughey and McKenna (2021), language acquisition is seen more than learning a set of technical skills, it is seen as context-relevant, and learners engage with certain kinds of texts in certain kinds of ways because they see value in doing so. They argue that 'academic literacy' is based on sets of values about what can constitute knowledge and how that knowledge can be known in the academy (pp.63-64), key precepts for epistemological access. There is also a need to reflect far more explicitly on the ways in which academics might assume that students already have certain literacy practices in place or what can be done to better enable access to these (Boughey and McKenna, 2021, p.65), which point to appropriate academic development support. To write a laboratory report successfully in Chemistry or an essay in Political Science or a case brief in Law is largely about understanding the disciplinary concepts, values and norms from which the particular language practices manifest. There is thus a limited relationship between the language practices expected in the academy and the medium of instruction being used. In the South African context, as reflected in this study, students from disadvantaged backgrounds tend to suffer greater degrees of epistemological disconnect between their school/home experiences and what they experience at university, especially in their first year.

Boughey and McKenna (2021, p.66) make another telling point: "having one's home language valued in the academy is about far more than easier access to knowledge practices. It is about identity and self-worth too, an issue which has only in recent years come to receive serious consideration in the South African academy…The language(s) we speak are integral to our identities. Students who do not hear their languages on campus, or even worse, hear them being dismissed, are clearly not going to feel welcome at university".

Nevertheless, as Foley (2004, p.57) had stressed, the processes entailed in the development of African languages as "academic/scientific languages for use in instruction are neither simple nor straightforward, but involve instead a number of complexities that need to be acknowledged and addressed". Thus, accounting for local contexts and histories is an important consideration. In the South African context, except for English and Afrikaans mother tongue students, there is little evidence of students learning in their own language and then succeeding or failing. As far as it can be determined, existing language research does not track cohorts of learners from Grade R to matric who have learnt in the mother tongue in all 12 official languages in South Africa. Indeed, in South Africa it is not possible to conduct such a study because for all individuals whose mother tongue is neither English nor Afrikaans, the language policy does not offer such opportunities. Where does this leave us? As discussed in some of the case studies, there are difficulties and pitfalls in teaching in both a student's first or second language in academic contexts. These need to be recognised, and the challenges will vary from institution to institution. Current solutions include translanguaging, tutorials being held in multiple languages, encouraging students to use a mix of languages in conversation with each other to enhance access to knowledge, academics using multilingualism as a resource for teaching, and indigenous languages slowly being used as formal languages of instruction and assessment (Boughey and Mckenna, 2021). The data from this study reinforces these assertions, including the observation that: "They will not make higher education learning instantly accessible to all, but they will serve as a powerful part of a much more complex move towards social justice in the academy" (Boughey and Mckenna, 2021, p.67).

Language policy also serves as an instrument of social cohesion. The language of instruction at an institution is not only about the cognitive capability of students. It has implications for recognition, representation and social justice, especially relevant in addressing epistemic access of historically marginalised students. The absence of languages in institutions of learning have also been related to epistemicide associated with epistemic injustice. Language inclusivity further adds to the potential for social cohesion and social integration, which the case studies demonstrate is lacking between more and less advantaged students. This has implications for future social construction in South African society and is captured succinctly in the purpose of the Language Policy Framework for Public Higher Education Institutions (DHET, 2020). Thus, the consensus for a multilingual language policy in education, for both pedagogic and social reasons, is generally acknowledged.

From the student data, shyness, lack of confidence, fear and anxiety emerge as significant obstacles in teaching and learning, preventing students from approaching lecturers and participating in lectures, as stressed in the UP-case study. Some students pointed out that their shyness inhibited their participation in class and that they preferred indirect methods of communicating, not because lecturers were unapproachable, but because they lacked confidence. Students were afraid to embarrass themselves when speaking up in a large classroom, particularly if they felt that their accent and communication skills were inadequate. Vulnerable students' fear of participation and embarrassment is a persistent concern in creating access to powerful knowledge in higher education (Respondek *et al*., 2017, cited in Chapter Seven).

The issue of class size was also identified as an ongoing pedagogical challenge. This was highlighted in the UP and UWC case studies given the rapidly expanding student numbers as lecturers struggle to provide individualised feedback and engagement. The problem is linked to the government's push for the massification of higher education, as universities are pressured to increase student numbers with limited resources. There is also the related criticism of the university's focus on performance targets given the increasing commodification of higher education, which staff believe could be counterproductive to meaningful student engagement: *I think it's very easy for managers and academic staff to get very quickly bogged down in the number-crunching, and miss, or marginalise what I believe to be the core function of the university which is actual teaching and sort of engagement* (06_AC04).

In some cases, lecturers were teaching undergraduate classes of one thousand and more students, which meant that marking has to be partially outsourced, in that way limiting the lecturers' freedom to provide feedback and academic engagement to their students. Thus, in many ways, confidence and class size issues suggest that the pedagogical challenges facing universities are not new, and perhaps, what is needed, is getting back to the basics: a student- centred learning approach, as is being emphasised at CUT.

The challenges experienced at CUT may be regarded in some ways as unique given its status as a university of technology. This is underscored in the curriculum bias towards attainment of skills and competencies, whereas curricula of professional fields in research-based institutions offer both professional skills and conceptual knowledge. The case study suggests that work integrated learning (WIL) is a distinctive feature of curricula at UoTs whose mandate is preparing students for particular employment situations and careers. This institutional distinctiveness can create an impression that the curricula of UoTs concentrate exclusively on imparting skills and competencies for occupations rather than conceptual and theoretical knowledge. If this is internalised in those who design and deliver curricula, specialised disciplinary knowledge and by extension, epistemic access to knowledge which technologists and technicians require to function effectively in specific occupations, can be undermined. On the other hand, CUT's adoption of the Student-Centred Approach (SCA) as the philosophy at the foundation of all teaching and learning practices, suggests the nurturing of engaged students in a scholarly academic and a rich learning environment, leading to producing graduates who will be well-rounded individuals (CUT, 2014).

The issue of belonging has also been highlighted. Contrary to students who felt a sense of belonging in the Faculty of Humanities at CUT, another pointed out that: *Our lecturers do not care that much about us. You have to do things on our own* (01_HS07). At UWC, students' interactions with lecturers and tutors differ in the two faculties. Science students attend lectures more often than students in the Arts and Humanities Faculty, which fuels the view that science students are more committed and that their workloads are more demanding. According to some humanities students, they feel relaxed and comfortable while speaking to their tutors, as tutorial classes are small, and students can easily interact with tutors and fellow learners. A class size manageable for lecturers and suitable for learning will enhance students' epistemological access. It should be noted that the use of tutors continues to be an important intervention across the case studies, with about 70%-75% of students at UJ accessing tutors more than once a month.

With the move to online learning during the Covid-19 pandemic and the move into the 4IR, students' IT skills have become the focus of attention. For example, UP provides a compulsory module for incoming first-years that teaches basic computer skills, which students identified as instrumental in their ability to use technology. At UWC, remote teaching and learning made such 'connecting' challenging, if not impossible; online lectures were poorly attended, and many students and lecturers were unable to function optimally in the rush to emergency remote teaching in 2020.

Finally, faculty entry requirements may have implications for the pedagogical domain. It is not clear from the case studies, nor from the available quantitative data how many students are granted access to university not having met the academic entry requirements. An evaluation of this aspect at selected institutions would be particularly revealing and speak authoritatively to rhetorical assertions that are made regarding the so-called school-university gap as well as 'low' throughput levels. In this regard, HEMIS should make provision for gathering data on the status of students having met the requirement as well as whether they had been accepted for extended curricula programmes. These

disaggregations should moreover be captured in the Vitalstats, thereby providing an evidence base for a more nuanced analysis of the sector to enable shifting practices that can address the country's fragmented and unequal character.

### Social domain

The social domain entails social interactions, intersubjective relations, attitudes, and behaviour with and among students, and it represents the social space in which university life occurs, understood as the campus climate and comprising the formal and informal environment within a university in which we learn, teach, work, and live (Cross, 2018). The campus climate is not static, it changes and influences how students become members within the academic practice at different times. While some campus climates are alienating, others promote belonging and a student feels part of the membership (Cross, 2018). Epistemic access is thus enabled where both the campus climate and student membership connect. Moreover, the social domain for students is not strictly confined to the campus. According to Cross (2018), the social domain has been neglected and ignored in the scholarship on higher education, especially its impact on student epistemic access and success.

Overall, the findings from the case studies demonstrate that, to the extent that it impacts on epistemic access, the social domain of institutions stretches beyond the physical space of the institution. Moreover, it is impacted by students' backgrounds, as well as the capability of the institution to accommodate students both on and off campus. The institution does not have the same level of control over the social domain as it has over the official and pedagogic domains because it involves processes that the institution cannot apply policies to, for example, the location of taxi ranks and associated taxi routes. Nevertheless, institutions need to recognise the immense influence that the social domain has on students' epistemic access and success, and that, where possible, appropriate interventions are considered. This is especially pertinent, given the increasing emphasis on the university's community engagement role if it is to remain relevant (Brink, 2021); and the renewed attention being given to an examination of the core purposes of the university (the current national universities histories' project coordinated by Professor Saleem Badat, University of Free State).

Several issues/themes relating to the social domain were highlighted in the data and are discussed next.

Student accommodation, linked to safety and security, is probably one of the major concerns for students, especially off-campus, as observed by a UL student: *Okay on campus it is very much safe. It is a safe environment actually ja, as compared to off campus. Off campus there are a lot of robberies going on, students are being killed, are being raped and all those stuff. If you are on campus, then none of those you get to experience them* (05_SS11).

Thus, as asserted in the UL Case study, living off campus poses a stumbling block to reaching or accessing facilities (library, computer laboratory, and internet facilities) on campus. However, to address this challenge the UL has provided transport and security to escort affected students (see UL case study).

Similarly, lack of accommodation was highlighted as a barrier to students' formal and epistemic access at CUT, with related knock-on effects on public transport times and class attendance, especially public transport during mornings and late afternoons for students from villages situated far away from the university campus. Students, mostly female, at UWC also raised security concerns in off-campus university accommodation. Fear of hijacking, theft, bullying, sexual harassment or rape has forced students to leave the university before it gets dark, hence reducing their time to access university library and/or extra-curricular activities, such as sports. This is an indication of safety as a societal problem, and once again, underlines the importance of the university's broader community engagement role. Student experiences at UJ were somewhat different as most of the students were happy with their residence arrangement (on or off campus). In the interviews, those living in off-campus residence reported more distracting incidents (such as TV and other noise) as well as challenges related to traffic and transportation which impact their class attendance. These concerns are, however, minor in relation to the more serious concerns relating to violence against female students. On the more positive side, students at UP described residence life as an enabling part of their university experience. This could mean that there has been some transformation of residence culture, which has historically been particularly alienating for black students (CHE, 2010). Being part of residence life has enabled meaningful social networks

and relationships, which is an important aspect of access and success in higher education, particularly for students with limited financial resources: *For the past two years I've been living at the university residences and it is quite fine. You interact a lot. You get to do activities together, build relationships and so forth* (06_SS01).

However, as is also the case at CUT, spaces in residences are limited, and not all students are able to enjoy the social benefits of residence life. According to the UP case study, some students' academic success may be enhanced by the support structures built into residence life (for example, study space, 'house parents' and peer mentors), while others may experience residence accommodation arrangements as distracting, culturally misaligned and therefore less enabling. Some students explained that the visibility of peers working long hours in communal residence study spaces motivated them to deepen their commitment to their studies and inspired their desire for academic success. Students at Wits adopted a positive approach in relation to transport, stressing that the use of public transport throws them into a shared physical space which then enabled relationships to build around related shared activities and experiences. While institutions might not have absolute control over dynamics in their social domain, institutions ought to remain cognisant of what they mean by the overall institutional cultures, in what ways it might contribute to or be a mediating factor in feelings of alienation, for example, and impacting epistemic access and success.

By way of addressing accommodation and security-related challenges, there was a strong call from students and staff for safe and conducive student accommodation as critical for students' epistemic access and success. While universities have been responding to student concerns within budgetary constraints, it is clear that a lot more can be done. One area that needs more nuanced and context-specific response is in the provision of student transport, for example in the case of UL and CUT. Some respondents felt that university management should make access to comfortable accommodation a priority, especially for students coming from other provinces.

Another important social issue centres around belonging or social connection, which resonates with institutional culture and diversity. This emerged quite strongly in the UP case study, with students stressing on social connection as a capability that enhances experiences of belonging to the university, and which students had reason to value. Valued social support networks identified in the interviews were both formal (for example, an appointment with a faculty advisor or residence mentor) and informal (for example, friendship with a more experienced peer). Students identified the importance of a sense of belonging, access to caring adult mentors, a safe space to share challenges and problems and social connections with diverse students: *Everyone is determined... but the people that I surround myself with are determined to achieve their goals. I think it is a safe space in terms of academics...I think it is easy for me to fit in...* (06_SS05). *[Residence life] really helped me with my studies... it was just my second home, even the [residence] parents that we had, they were like my own parents* (06_HS04).

The UP case study stressed the positive experience of residence life for first-generation students as reflective of the university's commitment to transforming an alienating and racially segregated residence culture associated with historically white universities. However, other students who were less keen on residence life, valued a quieter living environment and described themselves as introverts who preferred 'doing their own thing' to the frenetic pace of social activities at residences. Others found the university culture alienating, especially in comparison to their experience at a different institution, which was more reflective of their community environment: *Because I have been to [university X] ... it really didn't feel like I am in a different place than I am when I am at home, but when I came to [this university] ... it was very different* [06_HS03].

The quote above reflects an institutional culture that is inherently alienating for students when they are separated from their cultural identity and familiarity in the university's social domain. The silence of culturally significant symbols in the quote above, may refer to other silenced knowledge, symbols or ways of being that contribute to students who experience a lack of belonging, or who feel pressurised to assimilate with dominant cultures. This suggests that a deeper understanding of how cultural identity is marginalised or silenced could be included in institutional transformation initiatives. Students at CUT had similar experiences, with family, support from staff and community relations highlighted as contributing to how students negotiate epistemic access. The following excerpt is from an academic staff member: *From a social perspective I think it's very important and that we've seen in our programme is to understand the background of the students. ... there are really students that struggle and if you don't know why they struggle, then you can't solve their problem. Some students have to look after their families. They*

*have to leave at 5 o'clock in the morning to be at the campus at 8 o'clock and leaves the campus at 15hrs or 16hrs* (01_AC05).

A student portrayed a welcoming university environment: *feel at home because the staff are very friendly and the rules that they have set for the students are for the best* (01_HS08). The excerpt below from the Wits case speaks volumes about how students navigate the social domain of HEIs via peer support: *I had friends as I told you. Like most of my friends I met them at Bree taxi rank because we used to travel together to Wits University, coming from Bree, walking passed Mandela Bridge. And most of us our experiences were the same. We came from backgrounds, economic situations which were not ideal. So, having them in my life really changed me because they helped me to adapt. They were there for me and they helped me to cope with my fears as well, like the fear of failing, the fear of being not accepted fully, that social steps of diversity* (08_HS04).

The excerpt demonstrates that the social domain of institutions stretches beyond the physical space of campuses. Social domains of institutions are therefore circumscribed by the socio-economic backgrounds of those who attend them. This was also highlighted at UJ, where the challenge of belonging was expressed in terms of student diversity as many students came from closely-knit and homogenous communities where everyone knows everyone else. This was aptly captured by a student: *Johannesburg is an ocean of everything and almost everyone is here* (03_SS10). It is overwhelmingly individualistic: *you don't actually see people greet* (03_SS09). Thus, given the concerns over South African university campus culture (Badat, 2010; Soudien *et al.*, 2008), institutional culture, environment and support should certainly be among the top considerations when investigating throughput.

When students do not experience a sense of belonging or find the institutional culture alienating, mental stress may result. At UP, students and staff described mental health problems as a significant constraint to their success, especially when combined with financial stress: *Within the first six months of university, I was diagnosed with depression. It got to a point where I used to sit under a tree and do nothing the whole day* (06_SS03). *The majority of students come in … especially now with lockdown it is emphasised well, they're coming in with really more social problems - negotiating friendships, negotiating romantic relationships, negotiating their time management. I think a lot of them get quite overwhelmed with the academic expectations* (06_AS01).

At UWC, in order to deal with mental stress and isolation, students engaged in extra-circular activities on campus such as sports. Students attested that access to recreation activities at UWC does help in some cases in dealing with and overcoming challenges while on campus. The availability of volunteer programmes at UWC also provide opportunities for self- discovery, which can have a positive impact on their relationship with the institution. For example, several students knew about and formed part of the programmes at the Gender Equity Unit on campus. They saw this as a safe environment where students who identify with non-normative gender identities and sexual identities have a place that they deeply value and where they make connections. Students also get exposed to opportunities in developing a sense of social and political responsibility beyond their academics, which serves the greater society through community development work. Similarly, at UP, the campus environment beyond residence life also enables students to cultivate a sense of belonging by participating in university societies, and spending time in communal spaces on campus. In the quote below, the freedom to pursue cultural-specific social connections is a valued part of cultivating belonging. The freedom to speak one's home language is a crucial part of developing academic identity, without losing a connection to home and community: *The main reason behind [the university society] is to help other Tsonga people to adjust to university life as soon as they get here. …spending time with my people who are speaking the same language makes me to realise that, hey, I must not forget where I'm coming from* (06_SS08).

Very little emerged in the data with regard to students' political activism. For example, at UJ *students are not that active politically* (science administrator) compared to other universities. As noted in the UJ case study, it is unclear whether this lack of political involvement is due to underprivileged students' economic and family pressure to complete their studies as soon as possible, which would not be surprising, given that many are first generation students.

Finally, an important theme in many of the case studies was the challenge for students to balance their newly found independence at university

with the demands and rigour of academic work, which relates to the school-to-university transition gap. As one of the lecturers at UL observed: *So though as first years, the majority of them in their first year they are a bit struggling because they are finding it difficult to strike a balance between their studies and their personal freedom. See those students are achieving but not at their best optimal because they still have issues in terms of balancing the new environment, they're finding themselves in* (05_AD03).

Thus, in broad terms, accommodation, transport and security concerns, the issue of belonging, linked to institutional culture, mental health and the importance of extra-curricular participation, and balancing independence at university with academic work are some of the major social domain themes that have been highlighted in the case studies.

### Tying the official, pedagogic and social domains together

The intersecting nature of the three domains discussed above, is aptly captured in the UP-case study: For students with constrained resources, access is not a once-off achievement, that is, entry into the university, but consists of several precarious points of access that must be secured throughout the degree programme … *These include access to funds to apply to university, sufficient resources to ensure tuition payments, access to textbooks, transport, accommodation, and other basic living costs.* In the official domain, participating in academic development programmes is an important entry point to epistemic access that has an enabling and empowering effect on student capability, while in the pedagogic domain, there are benefits for students from individual attention in tutorials and smaller class sizes. Academic, administrative and support staff were more vocal than students about the relevance of institutional and faculty-led interventions in negotiating epistemic access across all three domains. Based on staff assertions, these interventions have become indispensable given the background and profile of students recruited and enrolled at the institution, specifically the knowledge gap dynamic, and may thus experience barriers when navigating epistemic access. For historically marginalised students, moreover, there remain many challenges in the social domain, particularly around safe and secure accommodation. Student resilience emerges as a critical factor, given the mental stress associated with academic practice and family and societal pressure to succeed.

That institutions do not have the same kind of control over the social domain as the official and pedagogic domains does not mean paying less attention to problems associated with it, especially in addressing institutional culture. Culture is created by all players at the institution, in all of their spaces which then ties them to the institution. Moreover, not only in a formal sense of physical access to the institution, but in an epistemic sense of being integral to accessing the knowledge opportunities or academic practices of the institution. Knowledge is not confined to disciplinary knowledge, but the navigational knowledge that students require to gain physical access to academic practices of the institution. The critical role of peers is highlighted in the social domain of institutions. Here, the institutions need not interfere, but this role needs to be made visible and emphasised as an important enabler of epistemic access and student success. As such, highlighting Ubuntu as part of students' social capital in university messaging and information documents, not as a 'nice to have' aspirational philosophy, but a real tangible, and necessary element of higher education experience, may require greater exploration and investment.

### Student agency and capability

In this study, student agency manifested largely within the notion of capability, which emerged as a key element of the project's theoretical framing. As argued in the Wits case study, capability concerns students' agency and the underlying features of the agency, including students' awareness and ability to tap into their environment for whatever opportunities and support provided, and also refers to the ability to avoid any toxic or unconducive influences. Self-motivation, taking responsibility for one's own work, drawing on compensatory capital, such as resilience and determination, are among the many resources that students depend on. Reflecting on the institutional mediation data above, agency and capability of historically marginalised students not surprisingly sought to address the issue of under-preparedness and the knowledge gap, drawing on compensatory capital and making individual adjustments. Somewhat surprising, though, was the huge impact that deepening financial constraints have on students' epistemic access and success.

### The education articulation gap

The education articulation gap challenge was highlighted across the case studies and given its systemic relevance warrants some elaboration. The 'articulation gap' generally refers to the knowledge and skills gap between school and university and is often associated with student under preparedness (discussed next). The articulation gap, often used interchangeably with 'knowledge gap', has been described as occurring at two levels: "Firstly, at the level of curriculum structure, whereby the schooling system seems to fail to prepare secondary school pupils for university studies. It appears there are different forms of knowledge structures, which create an articulation gap. Secondly, …that modes of delivery or pedagogy used in the schooling system appear to be totally different to those of universities, a difference that widens the articulation gap" (CHE, 2022, p.198). Although there have been various policies and interventions that have sought to address this challenge, given its systemic complexity and historical character, it continues to pose serious questions to academics and policymakers, and therefore deserves ongoing examination.

The discussion that follows includes a focus on student agency, the systemic challenge and related initiatives, as well as policies designed to address the articulation gap, including the perennial challenge of policy implementation. The findings suggest that students' epistemic journey is a function of their integrated, co-created experiences comprising student agency and institutional mediation activities. Student agency and capability of students from historically disadvantaged backgrounds are key to addressing the issue of under-preparedness and the knowledge gap. Most of the students who participated in the study revealed that they could self-direct to overcome their situations. Student mindsets about campus life appeared to be crucial to the outcome of their experience at university. It influenced how they viewed and interpreted their social and academic experiences, formed ideas about their capacity to succeed, and obtained an understanding of the value of success. Some students were able to change their mindsets and find inspiration from their negative experiences, thus increasing their chances of success. The researchers who participated in the study argued that student agency and the institutional cultural domain need to be in sync, to enable students to learn to negotiate campus membership, bridge the articulation gap and acquire epistemic access and success. Academic development support and other institutional interventions are just as important.

The report's findings on the education articulation gap underscores the fundamental systemic challenge that education sectors throughout the world have been facing over time. As Govender, McClennan and Ngoma (2017, p.23) noted: "System change focused on transformation must actively shift institutionalized (sic) practice". This was highlighted in Education White Paper 3: A Programme for the Transformation of Higher Education, in its assertion that transformation "requires that all existing practices, institutions and values are viewed anew and rethought in terms of their fitness for the new era", and that at the "centre of the transformation agenda, in terms of 'fitness'", is the White Paper's vision for the establishment of a single national coordinated higher education system that is "democratic, non-racial and non-sexist" (cited in DoE, 2008, p.9).

The findings in this study are a timely reminder that education policies relating to articulation have been confined predominantly to the formal technical and qualifications domains. The National Qualifications Framework (NQF) Act (2008) defines the NQF as "a comprehensive system approved by the Minister for the classification, registration, publication and articulation of quality-assured national qualifications" (cited in DNA Economics *et al*, 2018, p.3). Some objectives of the NQF are worth recalling: to "Create a single integrated national framework for learning achievements"; and "Facilitate access to, and mobility and progression within education, training and career paths" (cited in DNA Economics *et al*, 2018, p.3). By and large, policies and legislation have thus paid more attention to technical articulation (governance and structure – HE Act; qualification and programme development - NQF and sub-frameworks) as opposed to social, pedagogic and epistemological articulation. School and HE policies that address the affective and socio-economic conditions of the education system are developed separately and tend to neglect the integrated nature of the education system in the way that the qualification framework has been set out as a single system that can be articulated by a learner. Significantly, the pedagogic and social implications of the NQF levels have not received sustained attention. Should the NQF be reviewed again, individual case studies of the 'distance' between exiting NQF level 4 and entering NQF level 5 should be one of the core terms of reference of the review. Currently different degree programmes have different entry requirements. For example, to be admitted to a BSc in Computer Science (entry into level 5) a student must obtain a specific Mathematics as well as English pass in the National Senior Certificate (NSC) or Independent Examinations Board (IEB) examinations (exiting level 4). In addition, the individual should obtain a specific combined pass for all other subjects written in the NSC or IEB examinations. The technical and practical exploration of the extent

to which this 'distance' of exiting NQF 4 to entering NQF 5 can be adequately met by teaching and learning in a specific degree programme requires attention by the South African Qualification Authority (SAQA) as well as the CHE. For the DHET, a concomitant matter is the examination of both the extent to which entry requirements set for diploma and degree programmes represent an epistemologically bridgeable distance, and the extent to which students are admitted to diploma and degree programmes without strictly meeting the requirements. A matter for the DBE's consideration is whether the requirements for the different type of matric passes that enable access into a higher certificate, diploma and degree take sufficient account of the requirements needed to bridge into higher education studies. While the latter might be seen as necessary to transform formal access to higher education, it might at the same time skew throughput rates and perceptions of the articulation gap.

It is widely acknowledged that South Africa has the best social policies in place, including in the education sector and that the problem is one of implementation; thus, the challenge is about the disjuncture between policy and practice. The disjuncture is a result of: "poor dissemination of information pertaining to policy, limited awareness of policies, a lack of awareness of the roles and responsibilities pertaining to implementation that flow from the policies, and a lack of institutional will…[secondly] there exists a disjunction between institutional culture and transformation policies. In fact, the lack of consensus and/or of a common understanding of what these policies actually involve, was also raised as an issue by various stakeholders and constituencies" (DoE, 2008).

### Overcoming under-preparedness

While financial challenges faced by historically marginalised students have economic and social systemic roots, the challenge of student under-preparedness is rooted largely in the education system, specifically at the school and early childhood development phases. This emerged in several of the case studies. At UP, staff expressed frustration over the systemic reasons that students are under-prepared for the demands of university education, pointing to South African's historically segregated schooling system that continues to offer poor quality education to many black learners. The UP case study suggests that there is an important shift away from a deficit, individualised approach to student underperformance and demands of academic life by lecturers, to one reflecting an understanding of the social injustices that continue to disproportionally marginalise black students: *Our education system, the basic and higher education, disadvantages black students who were disadvantaged in the past under apartheid, and they are continued to be disadvantaged now… So, it's made me very angry that this government has failed black people in the same way in terms of disadvantage. Not so much the prejudice, but the disadvantage and the oppression that comes with poverty and with disadvantage, how this government has failed black people in the same way as the previous government* (06_AC04)

Similarly, at UWC, there is the view that the current institutional plan partly identifies the problem of under-preparedness arising from schools' failure to inadequately prepare students for rigorous academic work: *UWC remains committed to the widening and broadening of access to higher education. However, we recognise that students entering university come from very different and unequal schooling environments and, in general, there is a lack of academic preparedness for university studies. These factors have a direct influence on student retention and success. We will continue to make every effort to find effective ways to address the articulation gap between school and university studies. This will include renewed attention being paid to improve the provision of quality extended curriculum programmes, along with information literacy, computer and e-literacy skills* (UWC 2021, p.24).

The focus on e-literacy and computer skills featured across the case studies. At CUT, while recognising systemic injustices, under-preparedness was related to students' changing literacy skills, such as the use of social media and writing competence, which is a constraint relevant to a broader spectrum of university students: *I think the level of basic writing ability has changed. And I think this is actually across the board and the students who are under-prepared for using English who perhaps have not had much exposure to first-language English speakers … I think kids generally in schools are writing less and reading less and WhatsApping more and this has had an impact on concentration spans across the board and the ability to formulate an argument* (06_AC01). Additionally, at CUT, student under-preparedness is associated with language proficiency and life skills, arguing that 'language has the potential to exclude students from gaining epistemic access'. Significantly, CUT has introduced a number of interventions to mitigate students' shortfalls, or 'to create an enabling environment' including appointing senior students to mentor first year students.

Students at Wits further underlined the writing difficulties linked to under-preparedness: *I really didn't know how to write an essay because at school when you write an essay the only ones you know were writing English essays which are different from academic essay and academic essays you have to reference and all those things which are new to us* (08_HS02). A different strand of under-preparedness thus emerges from students' inability to engage with academic writing. This strand of literature assumes under-preparedness because students cannot write academically. At the same time, given they were in their final year, they had managed to navigate this 'obstacle'. At the same time, it does not happen without distress on the part of students. The extent to which it is a problem requires greater engagement in research as well as the implementation of academic practices by departments, institutions and academic and support staff. The UJ case study identified exposure and access to technology as one area of under-preparedness, observing that many students only learned how to use a computer at university. And for some science students, as highlighted by a UP student, under-preparedness was linked to laboratory work, which harks back to school shortcomings: *My first laboratory work was very difficult because I didn't know most of the apparatus that I have to use. So ja, I didn't know like the names, so it was very hard to locate my things ja like that because there were no labs back at high school* (06_SS02).

Anecdotally, there are 'corridor' conversations about students being spoon fed at school and thus unprepared for university where independent learning is required. The excerpt from the Wits case study below illustrates that, while distressing for learners, students from disadvantaged backgrounds might indeed have an advantage in this regard. It appeared some students lacked 'teacher presence' as teachers seemed not to care about their learners and what they were experiencing: *I feel like at school, tjo it was another mess again. Teachers at school were busy with their lives. I don't think they took time to ask are you ok? Are you coping? Do you understand? They just came I don't know; I think it's because in townships we are overcrowded. In my class we were fifty-something, so the teachers would just come to teach and then they go. Sometimes, I would just ask myself why can't she (teacher) just ask what's wrong? Why am I not coping? Why are my marks like this...? I feel it was another life that I had to cope with and adapt to, it was not home for me … At high school, they just touch and go, and at the end of the day what did I learn?* (08_HS13). In the same way that negative experiences of teacher disengagement could be a catalyst for independent learning, so too could it be catalyst to do better. The excerpt below from a student teacher at Wits is an illustration of this. Frustrated by the poor teachers motivated one to become a teacher: *And most of them [teachers], I think they did not care, hence I decided to be a teacher* (08_HS04).

It is not being argued that 'independence' should be 'taught' in this uncaring manner. However, this excerpt demonstrates that students who experienced a lack of support from teachers and 'make it' against the odds, can be at a pedagogic advantage when they arrive at HEIs. This also means that where the university environment is conducive, and addresses other needs, students will succeed academically. Ironically, in the case of this student, and perhaps many others, the need to mitigate teacher disengagement at school, and learn independently with peers could have been the catalyst for their success at university.

### Mitigating financial constraints

Within the context of this research project, disadvantage was, to a large extent, conceived of as being financially constrained and thus, being a NSFAS recipient was one of the sampling requirements for student participants. It is therefore not altogether surprising that financial constraints, together with the mechanisms to mitigate and mediate financial constraint would emerge as a resounding theme in this study. Although student financial difficulties in South African universities are not new, this 'knowledge' has not been engaged with comprehensively in the literature drawing on evidence from the field of student experiences of higher education. The key points to take away is firstly that students' financial or economic backgrounds are not 'simply' disadvantaged, there are many permutations. The second point is that students have formally accessed higher education and proceeded to final year despite this.

While generally derided by the popular press and by others, the findings that emerge from the case studies in this report illustrate unequivocally, that the NSFAS bursary scheme is instrumental in students' enrolment in and completion of their qualifications. Of course, critique of the NSFAS is not unwarranted; the administrative glitches in the system lead to anxiety and trials for many students and their families. An important finding relating to students' epistemic access is the 'NSFAS funding dependency problematic' or what might be referred to as the 'constant precariousness of formal access'. Data from most case studies highlight the persistent material and financial difficulties students encounter despite NSFAS funding –

many students struggle to make ends meet and are constantly worrying about whether the NSFAS funding will reach them on time. This not only raises questions about the efficiency of NSFAS administrative and management systems, but it also questions a central assumption of the study, namely, that physical access has been achieved for South Africa's historically marginalised students and that ongoing complexities and challenges only relate to epistemic or epistemological access, that is, the content and quality of their academic experiences. It would appear, therefore, that the constant struggle to hold on to formal access is having a deleterious effect on students' participation in academic practice.

A significant insight, in our view, related to mitigating financial constraint that we have not come across in the literature is the proximity and choice to attend a university closest to home. Both the centrality of NSFAS and institutional geographic location are enabling mechanisms for formal access to higher education institution as highlighted in the case study reports focused on students' backgrounds. Mitigating financial constraint by attending an institution that is closest to home emerged in the UL case study. Students and some of the staff members in the sample indicated that they selected UL because it was closer to home which limited their financial distress. In the same way that having a university close to home could be an enabling factor in the process to epistemic access, the opposite might be equally true.

Herein lie the conundrum of 'counting' bodies in the higher education sector, reported on in Chapter 3; the quantitative overview. From the shift in headcount enrolment in the higher education sector, one might conclude that nothing more needs to occur except increasing throughput. Yet we cannot tell if this 'transformed' landscape has been random to the extent that any individual who wanted to attend a higher education institution was capable of it, or whether groups of individuals, those living in remote rural areas, far from any higher education institution, for example, have been offered the same opportunities. The strides that have therefore been made in the higher education sector with regards to formal access cannot be considered complete. This further points to a data gap, either in how HEMIS gathers data, or which data are being reported, as discussed in chapters 1 and 8.

The general financial challenges experienced by many students was captured by a UJ PsyCaD Officer: *Financial constraints remain one of the main challenges during the lives of many of these students, where their families often relied on child grants, social grants, pensions or single income, like many others in their community… In addition, many of these students often take on a larger number of responsibilities at home: many are expected to look after the siblings; sometimes sending what they have (NSFAS or any other income) back home* (PsyCaD Officer).

In a few case studies, students' frustration and strife with NSFAS was articulated, including delays in NSFAS grant disbursal of funds and administration of NSFAS generally. The UWC case study stressed how students' financial challenges often affected their academic progress. NSFAS's overall fund management, including insufficient amounts, and the late payment of stipends, especially at the beginning of the year when registration processes were under way, was noted by students. UWC sought to assist students by providing work-study opportunities so they could clear accumulated debts.

While all students who were interviewed received NSFAS funding, their experiences indicate a significant socio-economic divide, to some extent influenced by the financial power of the institutions they attend. From the students' point of view, family members are usually their first call when they struggle with money when their NSFAS funds are inadequate (see section on Compensatory Capital). While some students struggled to meet basic needs such as food, electricity and transport, other students with greater access to financial support resources at home aspired to university-related expenses such as stationery, entertainment, clothing and social activities. At UP, students also struggled to navigate their limited financial capacity relative to peers with more resources. Students struggled to cover additional costs associated with participation in campus life, such as going out or dressing fashionably.

The excerpt below from the Wits case study speaks poignantly to how students' basic needs can intersect with academic practice: *I could say, God. I prayed a lot sometimes I would go to school and come back only to find that there is no food, and my roommate is eating pizza. On the other hand, I am tired, hungry and I still have to study because there is an exam tomorrow. I would be like God I give up. But I would then pray and say I know why I came to the University and so I need to push. I prayed a lot and talked to my sisters for they are my support system. At a later stage, I found friends at res, and we could help each other, in case I needed help with food, and bathing soap, for example* (08_HS13).

Besides the anguish experienced by this student, there is a resilience and agency founded on religious faith and the support from family and friends. It is therefore clear from the above experiences of students as reported in the case studies, that state funding, while essential, is far from adequate to mitigate the myriad financial challenges they face. Significantly, the energy expended in coping with these challenges could be taking a high toll on their ability to succeed in their academic practices at the highest level. The reality of financial constraints for students from disadvantaged backgrounds means that students' formal access to university is never absolute. Given what we know about the economic situation in South Africa, this means that, contrary to what was claimed in the proposal submitted to the CHE for this project, formal access is not dealt with at a level of lived experience, albeit that it is not a policy barrier. In other words, higher education is, in theory, formally accessible by all South African citizens. In practice, financial constraints, continue to be a barrier to formal access to HEIs, underlined by the 'missing middle' student category referred to earlier. This moreover is a critical barrier not only to epistemic access but also student success and the nature of transformation in higher education and beyond.

Despite the financial constraints and challenges observed in case studies, the student participants were in their final year of study. It could be possible that the ability to manage their financial situations, however dire, is what contributed to their capacity to learn to participate in academic practice. The converse may be equally true, that those unable to manage their financial situations are not able to learn to participate in academic practice. While this appears almost intuitive, it is significant to the extent that it points out that access to financial resources is insufficient; a student also needs to manage those financial resources adequately. In addition, students have to be able to cope under the financial pressures they experience in order to learn to participate in academic practice. The relationship between financial management, coping mechanisms when under financial pressure, academic practice and epistemic access could be explored in greater depth. An implication being that students should be provided with more financial literacy at university, and even at high school.

### Navigations related to (Un)Compensatory capital

Coined by Cross and Atinde (2015), the concept of 'compensatory capital' was used to explain how students who suffered marginalisation, could use their social capital to achieve academic success. It describes the assets that students from disadvantaged backgrounds draw on to participate in academic practice and is seen as a useful counter to the deficit model. However, though the notion of 'compensatory capital' clarifies epistemic access of disadvantaged students, the gap is that it overlooks diversity within disadvantaged students themselves, resulting in over-generalisation of the concept (cf. Chapter 2).

In this study, 'compensatory capital' was described largely in relation to family and community. This was especially apparent in the experiences of students at UL: *They [parents] always taught me hard work patience, and compassion (05_SS13). I took my family values and beliefs to the university and what I can say when you are in that environment you must choose the people that you want to be with* (05_HS08).

With regards to values, beliefs and lessons they had learnt from their community, a student pointed out that: *I believe that you are who you are because of our society, right*? So, *I believe everything I mean values and norms and everything we share, and we learn everything through our society and through the groups that you are living in*. So, *I believe the community has contributed a lot as you said to where I am right now today* (05_HS11).

Similarly, at UJ, students compared the importance of family and community in relation to Ubuntu. Ubuntu is both about giving and receiving: *I do not live for myself, but I live for others as well* (03_HS01). *I am facing something, we come together and find a quick solution together* (03_HS14).

At UP, however, some students described their home communities as negative, toxic or disabling, while university life provided an escape from adverse conditions and an opportunity to cultivate aspirations and an independent identity: So now as a young one you don't get inspiration; you don't get inspired [by the community] … *So now the inspiration is being dragged down, more like we're just surviving* (06_SS01). *[M]ost people that lived in my community were unemployed. They were alcoholics. They were drug users … there were no role models, people you can look up to and say hey that person is doing something with their life. So, it is not a positive community experience* (06_HS02).

Similarly, at CUT, students interviewed from the Faculty of Health and Environmental Sciences (FHEs) and Faculty of Humanities (FH) also shared how their surroundings and family environments consisted of overcrowding, lack of study spaces at home and lack of connectivity, which impacted negatively on their studies.

In the Wits case study, while some students expressed support from families, it also emerged that both the rural and the township communities can be unsupportive of students going to the university. Students pointed out that by going to university, they become vulnerable and face the risk of resentment and exclusion by their communities: *And then the stigma around the community will get to you because like, now they feel like you are more important, you think you are more important since you are at varsity* (08_HS04).

During semester breaks, some students involve themselves in their communities to show their allegiance to the community, preserve their membership and regain community trust. It would be interesting to understand how first-generation students balance their emerging academic identities with the perceptions of diverse community environments. It could be that students experience identity struggles as they seek to adjust to the requirements of an independent, successful individual, while remaining loyal to a community identity that has been historically projected as deficit or inferior.

Given the differences between home and university, students report needing to change who they are in order to succeed. A student recalled how she had to abandon her experiences in favour of the university's ethos and values. This frustration was captured as follows: *One thing that I don't like about university, it changes you, it wants you to adopt its own lifestyle, if you are coming with your own lifestyle, I had to change the way I dressed, the way I appear but it took me time, maybe a year then I had to adjust because I was coming with my own style* (01_SS07).

What emerges from the data is that compensatory capital can just as easily be uncompensatory capital. From the case studies, narratives emerged of students being supported by families and communities, needing to support families and communities, and being hindered by family and communities. Similarly, it appears that succeeding at university might remove one from one's community. As has been emphasised in this chapter, the students that participated in this study have succeeded and reached their final year,

### Galvanising mindsets

The term galvanising mindsets perhaps best describes the ideas students have about themselves and their situation that contributed to them learning to participate in academic practice. Student mindsets about campus life appeared to be crucial to the outcome of their experience at university. One student at UL explained that he had to be *open-minded about varsity life so that [he] can adapt so well* (05_SSH).

The UJ case study shows how the expectation to work hard is acknowledged by all students. Translated into practice, work hard often means *study[ing] every day* (03_SS17). Another more concrete study tactic pointed out by many of the students interviewed in the UJ case study is time management. Fundamentally students demonstrate an awareness of their agency, ownership and responsibility that leads to determination and persistence. One student explained that *we pave our own future* (03_HS08). The UJ case study also demonstrate that students were inclined towards practicality; *they always have a backup plan* (03_HS09), for example. One result is a quiet confidence that one can *deal with [things] as best you can in whatever ways you can* (03_SS11).

The pressure to succeed as first-generation students could be a contributing factor to the galvanised mindset. One student explains: *None of the older generation have gone to study further, which actually in a way, puts me under a lot of pressure, because I sometimes feel like I have to meet a certain amount of requirements in order to satisfy my family and I don't want to be in a situation where if I don't achieve this, then it means that everything that they have done for me, everything that they have done to support me through school, and now through university, I don't want that to be in vain* (06_HS01). The point is amplified by Masters (cited in Baldwin *et al.*, 2020, p.20-21) in the Wits case study suggesting that "adversity is

the context in which we recognise resilience"; and that resilience comes from simple processes and resources such as parents, unconditional love, support or caring by the community or "mediated by psychosocial processes" like an attached grandmother.

One emerging issue was the way students were able to change their mindsets and find inspiration from their negative experiences: *… from there, it's a matter of looking back and then saying … you don't want your kids to experience what you went through … these were the conditions that I encountered, these were the challenges that I went through, but then for future purposes, I should shape my mind in this way. I had to change my mindset just to be; this is what I want to change, this is what I want my future to look like. Hence, those challenges kind of shaped the way that I perceive things … my immediate context … to say: this is what can be transpiring at the moment but that does not mean it's what should transpire in the coming years. So that's how the challenges came in shape in my frame of mind…* [08_HS06]

What is noticeable is the issue of the students' mindsets, that is, how they view and interpret their social and academic experiences, form ideas about their capacity to succeed, and form an understanding of the value of success.

Part of the participants' agency involved self-reflection to identify what was going on both right and wrong and for the latter, to find ways of changing the course. Bandura (2018) regards self-reflection as a major part of agency. In order to change the situations through the exercise of human agency, students need to evaluate their lives and areas requiring change. This is evident in the admission made by a participant in explaining the academic journey through the years at university: *… so, there was a lot of shifting and change which occurred in terms of my academic performance. I would say that during my first-year level of study I would obtain fifties. I would perform maybe up to sixty which would basically be the maximum mark which I got. And then as I got used to the university life, you know, consulting, associating, talk to people, I saw how things are done, how can I change my study methods and stuff like that there was change regarding how I performed. I then managed to obtain distinctions which actually made me feel proud of myself because I could then realise that you know what, I'm also capable and able* (08_HS03).

Overall, it would appear that students undergo a process of mental resilience development in their academic journeys, which becomes critical to their eventual success.

### Overview of student agency and capability: towards a model of student resilience

The themes drawn out in this section contribute to a notion of super student as an element of epistemic access. From the findings presented in the case studies, students from disadvantaged backgrounds require the capability to rise above the odds by overcoming under-preparedness, mitigating financial constraints, navigating uncompensatory capital or using compensatory capital to navigate their university experience and drawing on a galvanising mindset.

This might bode well for the students who succeed, that they have the wherewithal to traverse the higher education journey. Success, however, appears to come at a high cost, including student mental health; more so for students who do not succeed as well as those who do. Of course, this process might be empowering for many students who emerge in the labour market with the necessary agency and capability to succeed there as well. The question is are there added conditions required for this to be a positive effect, and at what expense to themselves, their relationships and support networks? Research examining mental health and resilience with cohorts of students longitudinally could prove insightful for a clearer understanding of this phenomenon.

### Perspectives on decolonisation and 4IR

On the whole, participants were less vocal about decolonisation than the 4IR. One case study that engaged with decolonisation was UP, although from the perspective of academic staff and the institution, rather than students. At UP, most students were not familiar with the concept of decolonisation and did not engage with the concept as part of the interview. Some students shared their experiences or perceptions of changes around decolonising, which was often associated with the language policy and racial inclusion.

Since the #FeesMustFall protests, UP has however intensified the visibility of decolonising initiatives and made notable progress in cultivating a critical institutional discourse. A number of university departments and faculties have undertaken specific projects to operationalise transformation policy in order to transform institutional practices and cultures and improve the representation of black scholars and students at the institution, including initiatives to Africanise the curriculum, a curriculum renewal project and decolonisation of an Honours curriculum.

Lecturers' views of the university's decolonisation interventions show marked tensions and disagreements. Some staff agreed that curricula, institutional spaces and cultures should be decolonised. Overall, staff conceptualise the decolonising project as a continuation of the university's ongoing transformation. Staff responses suggest that the decolonising project demands focus, energy and commitment. Most lecturers acknowledged decolonising as an institutional project that they support. However, some lecturers suggested there is an uneven commitment to the project, while others felt that decolonising is an empty policy exercise: *When we had a faculty review last year, one of the questions they asked was "are you decolonising?" Now obviously, no one wants to report that we have done nothing on decolonisation, so everyone is making it clear for that purpose … as you are preparing for your promotion interview, you think about potential questions, and you realise that is one of the questions.* (06_AC06). Other lecturers who are concerned about the needs of 'under-prepared' students, question the relevance of decolonising and believe that resources and time should rather be invested in developing students' academic competencies.

While staff appear to have more sophisticated conceptual and practical understanding of decolonising, students' understanding and experiences of decolonising were marked by uncertainty about the definition. Some students shared their experiences or perceptions of changes around decolonising, which was often associated with the language policy and racial inclusion: *I think ever since I've gotten here, I think the university has quite transformed because now it is more inclusive … My experience has been okay no problem. I had been able to interact. I didn't feel like we still need to do more work here in this certain space* (06_SS01).

At UJ, it was noted that science students generally talked more about the 4IR while Humanities students spoke more about decolonisation. It was not entirely clear in the case study why this might be the case, although it could be surmised that science students are more technologically savvy, and decolonisation is more closely associated with subjects such as political science. Similarly, at UWC, science students were reluctant to engage with the idea of the 'decolonisation' of society and education, preferring to speak about the 4IR and stay with the dominant understanding of the science curriculum as 'objective' and 'scientific' and 'neutral' without problematising the history and politics of the science curriculum or the findings of research in science.

Unlike other institutions, Wits students were more vocal about decolonisation. Indeed, Wits students who participated in this study thought that the decolonial project was happening at a very slow pace and the tendency of prioritising whiteness within the university environment continues. The most important thing is that the university has embedded the decolonisation discourse in teaching and learning and several students are gaining interest in the subject. For some participants, decolonisation must go beyond symbolic change to interrogate what is involved in the content and methods of teaching within the university (Maringe & Chiramba, 2021). This is what one of the participants had to say: *For me, I want to remain in high school and be part of decolonising education in terms of language. I want to be one of the people that will be leading that issue to make sure that we are really decolonising education, language-wise and even content-wise* (08_HS02)

A shared student voice about decolonisation could however not be determined in the case studies. The views from staff and student participants were linked to both the university context and faculty in which they were enrolled. For example, the Wits humanities students expressed the likelihood of continuing the decolonisation project, while at both UJ and UWC, science students were reportedly not interested in decolonisation. Given the fragmented coverage of decolonisation in the case studies, it is unclear how it will continue to impact on students' epistemic access going forward, or whether it will have any relevance for their academic success, beyond providing a context to understand their histories.

### 4IR, Covid-19 and 21st century skills

Two main components of the 4IR emerged as important for participants. The first was automation and the second, connectivity. In the context of Covid-19, connectivity was especially acute.

Automation for participants in the case studies however, equated to loss of employment. One student from CUT articulated how automation has impacted a family member: *My uncle lost a job because of that, they had to employ robots and remove them from their work so, it's good to evolve but cutting out certain people and pushing them over the edge. People need to be provided with skill that they can use instead of just replacing them with robots* (01_SS07)

Similarly, at UWC, a participant cited the example of how the automated machine used in uploading credit on student cards in the library, makes academic life easier, but sadly staff lost their jobs due to this transformation. In the UWC example, the link between automation and academic practice is easier to identify than the CUT example. The implications between automation, and the processes of accessing and (re) producing knowledge however needs more examination than this study allowed for.

If one's academic practice within the context of the 4IR is determined by access to ICT devices and connectivity to the internet, students from lower socio-economic backgrounds, and those from rural areas in particular, are at a disadvantage compared to those from middle-class suburban areas of metropolitan cities. Students from rural areas reported that they engaged with computers and accessed the internet for the first time after they had enrolled at that institution. In addition, the lack of connectivity became specifically acute when the Covid-19 pandemic struck in 2020.

UP students from marginalised backgrounds, found that going back home while having to adapt to an online learning model exacerbated their vulnerability. Many students reported that residence and private accommodation provided stability and a routine that is conducive to learning. The need to go back home during the university year in 2020 created significant disruption: *It was a situation of data issues. I can say like March (2020) we were sent back home and two weeks later, three weeks later we were sent emails; learning must continue and all those things. But seeing that hey I don't think that my home environment was very much conducive. Because one I have network issues. Two, I have data issues. So, you basically you cannot attend live lectures during the day and we have to like…study during the night so you know at night the network is free and all those things …That was one issue that's why I applied to come back to res so that I don't have that for this second semester* (06_SS06).

While the Covid-19 pandemic has had a profound impact on all university students who made the sudden shift to an online learning environment, poor students are more reliant on access to resources at university such as Wi-Fi, mobile data, meals, library access and study space, compared with peers who are able to compensate for the lack of these resources using family and community resources. At CUT, although 4IR is a priority, many institutional and structural factors including weak and unreliable connectivity, remain barriers. On the other hand, compared to other universities, participants at Wits felt that their university was more prepared for remote teaching and learning.

This is supported by one academic staff member who emphasised the fact that the Covid-19 pandemic came when he was already into blended teaching and learning, as a result, students were already used to online platforms and engagement. The 4IR is likely to perpetuate inequalities between the advantaged communities, mostly Western nations, and the indigenous African communities. According to this view, therefore, the 4IR can be alienating to marginalised students and the general African community, from meaningful participation in economic growth in South Africa. One academic staff member suggested that if we really want to realise the impact of the 4IR in our African universities, we should redefine 4IR in our own contexts and refrain from replicating how they do it in the global north because of varied contextual realities: *We can never be on par with the first world especially when we have the education system that we have in South Africa where we have IEB [Independent Exam Board] education and working-class education. So, we cannot talk about the Fourth Industrial Revolution in the same way it is understood by the first world. That is why we need our own or we need to create our own Fourth Industrial Revolution because*

*five years ago at least we had the students in class, and we had the students on campus. And we tried by all means to work with them to introduce them to this so-called Fourth Industrial Revolution even though that came from the rural of the rural places* (08_AC05).

Closely associated with the 4IR are 21st century skills in the context of promoting epistemic access and success for students at CUT. The storyline running through the responses of all the participants is the conceptualisation of 21st century skills to mean soft skills which students need in addition to hard knowledge of respective disciplines. The dominance of soft skills that inform policy and practice on curriculum design and the Teaching and Learning Plan at CUT are GAs (CUT, 2020). These include: being environmentally sensitive, being socially engaged in your communities; being entrepreneurial; being innovative; thinking creatively and critically, and applying a range of strategies to solve/find solutions; using information and communication technologies effectively; using basic mathematics; budgeting and financial management skills; demonstrating a depth of specialised disciplinary knowledge and skills and being able to apply them in different contexts to solve problems; working independently and in teams, to manage your own learning; working and taking responsibility for one's self while contributing to teams such as learning communities; citizenship, and global leadership.

The findings show that both staff and students have appreciated the use of digital technology and application. The outbreak of the Covid-19 pandemic forced universities to increase the use of online platforms and on a larger scale than before. This has changed the way students used to learn and interact face-to-face with peers. Students miss the social interaction but have developed computational skills and their applications. The staff also developed and prepared materials on various online platforms which meant that students were able to gain access to course materials, academic staff and support staff and progress in their pursuits.

# Chapter 11

## Conclusion and Recommendations

### Conclusion

Case studies typically highlight unique features of the case and make generalisations across the cases difficult. In this study, however, the data points to a substantive degree of commonality. This does not mean that there are no differences unique to the case studies – indeed, institutional mediation - largely through academic development programmes - and student agency and capability together point to multiple factors that combine to enable students to negotiate epistemic access and success at the different universities; hence, the diversity and uniqueness of case studies are evident.

Almost 30 years into democracy, questions of student access and success, especially those from historically disadvantaged communities, remain at the core of the transformation of higher education in South Africa. The CHE 2022 study has highlighted several existing fault lines that continue to impact student access and success, including challenges of policy articulation and systemic alignment, curriculum relevance, academic development support, student health and resilience, inadequate funding, management information systems upgrading and monitoring and evaluation.

An uncomfortable diagnosis of the study is its questioning of whether physical or formal access to higher education is indeed 'a thing of the past', given the enormous problems that poor students from disadvantaged backgrounds within the system encounter regarding inadequate funding, safety and security and mental wellbeing, all of which impact students' academic journeys. While many students succeed against all odds, success comes at a high personal cost to student health and their families' ability to sustain themselves and their communities. This requires the DHET and the institutions of higher education to be intentional in ensuring that policies aimed at improving epistemic access and success are implemented as envisioned. The report also appreciated the role of NSFAS funding in mitigating students' financial constraints. However, the need to improve the efficiency of NSFAS administrative and management systems was reiterated.

Just as the worsening economic climate and its effects affect students' ability to navigate their academic journeys, universities too are under enormous pressure to put in place programmes that would enhance, and not stifle, student epistemic access and success. The fundamental challenge of curriculum transformation within the context of lingering coloniality, poses serious challenges for the sector in ensuring student access and success. It is clear that some institutions are faring better than others in their overall transformation journeys, and an important pre-requisite for better systemic outcomes, is attention to accurate and inclusive management information systems that can facilitate accurate interpretation and analysis of the rapidly changing teaching and learning environment, including the Fourth Industrial Revolution and climate change effects.

While some of the advice has policy implications, the overall thrust of the advice is that the policy challenge is more about implementation, rather than the formulation of new policies. Moreover, many of the decisions and interventions proposed relate to issues of efficiency, coordination and improving practice. Nevertheless, there are serious intellectual/epistemological choices to be made around the curriculum and making students' overall academic experiences more meaningful and relevant, as highlighted in the advice on academic development support and language policy.

While academic development interventions on the part of institutions provide the glue that is needed for addressing the perennial challenge

of student under-preparedness and knowledge gap issues, there is a need for a granular appreciation of the effectiveness of AD programmes. This means careful monitoring and evaluation of the exact numbers of students that regularly access AD offerings, ensuring the requisite competencies of AD providers in specific programmes, such as psychological support or extension courses, and undertaking cause and effect studies. Moreover, the continued reliance on AD programmes, and given the increasing student numbers each year, suggest an expanding financial burden on institutions to sustain their capability in this regard. Historically disadvantaged students appear to be precariously poised, constantly worrying about economic survival, thereby adding to their mental stress and anxiety arising from their conventional epistemic challenges. This is compounded by students' concerns around safety and security linked to student accommodation, especially off-campus. The data, ultimately points to the growing importance of student resilience in navigating their epistemic access and success, together with institutional capability and support.

Finally, the data has implications for policy[19] and future research, which is encapsulated in the following recommendations:

### Policy Issue 1: The education articulation gap

The report's findings on the education articulation gap underscores the fundamental systemic challenge that education sectors throughout the world have been facing over time. As Govender, McClennan and Ngoma (2017, p.23) noted: "System change focused on transformation must actively shift institutionalised (sic) practice".

Recommendation: the Ministry and the DHET should, in the short term, organise an education indaba of key stakeholders including policy makers, educators, business and labour to explore the articulation of basic education with HE, with the goal of refocusing attention on a more coordinated education system. Alternatively, a focused task team to deal with this ongoing concern might be more productive in the short term. A key part of the task team's mandate would be the examination of the school curriculum in relation to higher education needs, not only in terms of disciplinary/content knowledge but broader learning skills and competencies, such as critical thinking and analysis, and ICT. Another option would be establishing a permanent oversight committee to monitor the transformation of higher education as contained in the Report of the Ministerial Committee on Transformation and Social Cohesion and the Elimination of Discrimination in Public Higher Education Institutions (DoE, 2008). The mandate of the oversight committee could be expanded to have a sub-focus on student epistemic access and success, which is consistent with the Minister's request for the CHE to play the role of a permanent oversight committee.

### Policy issue 2: Rethinking curriculum and the knowledge debate

The debates include a focus on decolonisation of the HE curriculum in the context of the lingering dominance of Eurocentric curricula at universities, pedagogical and language policy challenges. Additionally, participants cautioned against the impact of 4IR and the turn to digitisation on social isolation, the lack of a sense of belonging and persistent inequalities in South African higher education provision.

Recommendation: Funds could be ringfenced for a national focused debate on knowledge in, and for society, including the education decolonisation project and various forms of knowing. However, given that many students did not highlight decolonisation as critical, further research is warranted prior to spending on a focused debate. Additionally, a cautious approach is advocated whereby interventions are tailored to the specific challenges of disadvantaged students, whether informed by curriculum delivery or socio-economic issues, before any decision is made to change the three-year B degree to a four-year B degree. Commissioning research to investigate students' programme selection, the reasons for doing so and especially, the lingering student dropout crisis, should be considered.

19 The policy implications summarised here have been culled from the CHE Ministerial Advisory Note emanating from the report.

### Policy issue 3: Institutional capability and support

Institutional AD programmes are identified by students and lecturers has critical in ensuring the epistemic success of disadvantaged students. However, greater monitoring and evaluation of the effectiveness of AD programmes and establishing conclusively the causal links with student performance is needed (suggesting an area of future research) to help inform targeted interventions.

Recommendation: The findings indicate that programmes that impact student access and success positively are writing centres, tutoring and psychological support services across the institutions. The scope and depth of AD is expanding, not shrinking. This suggests that institutions need to dedicate more time and resources to AD, including its monitoring and evaluation. Student academic identity development, in all its complexity, should lie at the centre of institutions' academic development programmes, as they play a crucial role in facilitating epistemic access and success. This entails encouraging and supporting student self-efficacy, time management, planning capacity and forethought skills; as well as promoting the notion of student academic agency in developing appropriate disciplinary meta-cognitive frameworks which are proving to be key levers for student epistemic. These findings could also feed into the proposed articulation gap task team in determining what skills are required.

### Policy issue 4: Higher education language policies

South Africa's language-in-education policy in the democratic era recognises explicitly the relevance of developing all official languages, especially its indigenous languages. The study found that language policy and reforms at universities, to date, have remained at a cosmetic level, as indigenous languages have not developed sufficiently to become the language of teaching and learning. The major concern highlighted across the case studies is that English continues to be the only medium of instruction in most university programmes, thereby disadvantaging students for whom English is not their first language. The language of instruction at an institution, moreover, is not only about the cognitive capability of students. It has implications for recognition, representation and social justice.

Recommendation: Universities should be encouraged and supported to pursue a multilingual language teaching and learning policy that gives due consideration to diverse institutional contexts and histories as highlighted in the case studies. Universities should be supported to review the role and function of Academic Development Centres, to focus equally on indigenous language support, as well as disciplinary literacy support given the epistemological nuances of different subjects. The CHE, together with universities, could explore more carefully the possibilities of a dual/multi-medium language and teaching policy, to cater for the diverse student populations, including historically disadvantaged students. Simultaneously, HEIs should engage with language research programmes currently underway, such as the Human Sciences Research Council's (HSRC) 'Imprint of Education' programme, and similar studies at universities, such as UJ on 'Reimagining the African University'. Universities should indicate as part of their institutional planning processes "how they plan to give effect to the development and strengthening of indigenous languages as languages of scholarship, teaching and learning and communication" (LPF, 2020, p.3). This should go beyond just promulgating regulations and policies. Effective interventions will require workable strategies for developing African languages-based curricula to mitigate the continued hegemony of the English language and meaningful inclusion of students from disadvantaged backgrounds.

Universities should be supported to review the role and function of Academic Development Centres, to focus equally on indigenous language support, as well as disciplinary literacy support given the epistemological nuances of different subjects. Writing centres should be capacitated to facilitate the upskilling of indigenous language competency of students and staff, in addition to the largely narrow focus on English. This work has been started at some HEIs, but there is much more that can be done. Tutorials in home language should also be considered, as well as the appointment and promotion of African scholars and lecturers with multilingual capability to further enhance diversity.

Universities should equally focus on academic literacy development because, regardless of what language students are taught in, they could fail or succeed, if they are unable to navigate the rigours, nuances and specific practices of the academic context, which constitute the ways of seeking, understanding and using knowledge. Based on the evidence from the case studies, a study that scrutinises curriculum delivery should have a particular focus on language in context, including the translation of course material into African languages and the cost implications. Further,

given the importance of home language recognition as part of a transformed and inclusive ethos, universities could explore how structural and pedagogical arrangements can expand the inclusion and recognition of students' home language.

Teacher education programmes should develop specific modules and/or degree programmes for teaching in South Africa's indigenous languages based on regional demands, institutional capacity and resources. Such programmes will contribute to the supply of suitably qualified language practitioners to enable appointment and promotion of African scholars and multilingual lecturers and further enhance diversity.

### Policy issue 5: Student resilience and wellbeing

The study has highlighted the need for today's historically disadvantaged student to develop enormous resilience to be able to successfully navigate the academic journey, considering the multiple challenges they must mediate, from the pedagogical to the social to the official, and the development of an academic identity and management of associated emotional and mental wellness.

Recommendation: There is a compelling case to be made for the provision of policies and procedures for crisis and acute/chronic conditions of mental health. While organisations such as Higher Health focus on student mental health and gender-based violence, a comprehensive survey on what is in place across the sector can serve as a basis for future programme development based on the gaps identified. This would then inform the need for a national policy to support institutions and the sector to introduce systemic interventions at scale if required. National advocacy and education campaigns are also measures that a national policy could make provision for.

### Policy issue 6: The higher education management information system (HEMIS) and additional categories to highlight transformed access

Disaggregating throughput by school quintile and being a NSFAS recipient are two categories that could be crucial indicators with which to disaggregate throughput data, so that social stratification and its impact on student access and success in higher education could be illustrated and analysed. In order to determine the extent to which the HE system has transformed and broadened participation, population group/race and gender, currently the main data categories captured by HEMIS, are insufficient; access and success should be tethered to class/socio-economic status and geography as well.

Recommendation: Directing the DHET to enable the provision of links to HEMIS data from the Department of Basic Education's Education Management and Information System (EMIS) data, and the NSFAS' data bases in order to enable institutions or the DHET to reference school quintile as well as geographical location and NSFAS data to HEMIS datasets. This might require additional guidelines, training as well as technical IT system development, but a policy intervention is not required. The CHE could include those analytical categories in the Vital Stats publication, which might require a directive or action item to be instituted. This would create opportunities for a more nuanced, intersectional analysis of student epistemic access and success challenges. The Ministry and DHET should engage with the Presidential Commission on the Fourth Industrial Revolution on their recommendation for the establishment of a National Data Institute as its data mining work would have a direct bearing on the analytical capability of the HE sector.

### Policy issue 7: Student Funding

Findings from the study confirm that the funding of students from historically disadvantaged backgrounds will remain a persistent challenge and that the over-reliance on the NSFAS requires constant review.

Recommendation: The Ministry and DHET should continue using various student funding models as outlined in the Review of Higher Education

in South Africa Twenty-Five Years into Democracy (2022) to ensure funding sustainability given the anticipated financial burden on families and communities with disadvantaged backgrounds due to a deepening national and global economic crisis. Block grants constitute the main state funding for universities, and in this regard, the Ministry should consider revising the institutional factor sub-block grant which disqualifies universities "whose proportions of disadvantaged students stand at 40% or less" (CHE, 2022, p.58), to ensure the funding of all universities through this mechanism based on their numbers of disadvantaged students. In similar vein, earmarked grants made available for specific purposes designated by the Minister of Higher Education, Science and Innovation, should be reviewed with a view to increasing their allocation, specifically the University Capacity Development Grant and Historically Disadvantaged Institutions Development Grant. A review of the impact on institutions of these funding mechanisms, however, would be useful. Ultimately, though a more sustainable institutional funding mechanism is needed, which is not an easy task considering the competing policy priorities and the country's ailing economy. There is nevertheless a huge body of completed and ongoing research on funding models which can be reviewed to inform future funding decisions.

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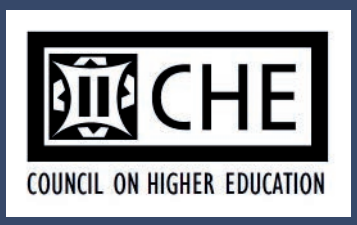


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