

# Understanding Students: Putting Students at the Centre of Institutional Design



**UNIVERSITIES  
SOUTH AFRICA**

## **Context**

This document marks the second in a series of publications being issued by Universities SA (USAf) in partnership with the Centre for Teaching and Learning (CTL) at the University of Free State. The series is sharing findings from a set of surveys of students at our institutions of higher learning – which are meant to enable our understanding of the kind of students we are enrolling and what it is that they bring into the higher education environment. The purpose is to obtain insights from these findings, that help us design an environment best suited to match student needs. The first edition in this series was issued in March/April 2018, and the next one is due before the end of 2018. The CTL conducts the Beginning University Survey of Student Engagement (BUSSE) and the South African Survey of Student Engagement (SASSE), amongst others.

This initiative is a direct response to a concern raised in 2017 by USAf's Teaching and Learning Strategy Group (TLSG), to the effect that enhancing students' learning experiences is not receiving adequate attention. Even though 88% of USAf's member institutions were found (in a survey conducted by the TLSG) to be assessing undergraduate students' learning experiences, it is not necessarily for one common purpose. Whereas most of the surveys are aimed at improving the quality of teaching and learning or, more broadly, the curriculum, some are carried out to achieve a variety of other purposes, including encouraging lecturers to 'reflect critically' and to 'celebrate best practice', but also for institutions to understand the holistic student experience so that they are designed to enhance the quality of learning and teaching on the one hand, and the quality of student experience and engagement on the other.

## **Acknowledgement**

Universities SA wishes to acknowledge the Centre for Teaching and Learning (CTL) at the University of the Free State, who are supplying the BUSSE and SASSE content and are thus instrumental to the production of this publication. We specifically extend our gratitude to Professor Francois Strydom, Director and Head of the CTL and the Centre's Principal Researcher in student engagement, Dr Sonja Loots.

**Cover photo:** Courtesy of the University of Pretoria.

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# Putting students at the centre of institutional design

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**Like some of their international peers, the majority of South African students are financially stressed and often hungry, have unrealistic expectations about their capacity to cope with their studies, and are worried about finding a job that matches their qualifications, according to recent student engagement data. By designing more student-centred institutions, South African universities can help to ease some of the stresses currently facing students and boost their success.**

Two multi-institutional and longitudinal surveys on student engagement in South African universities have produced a rich vein of data about the experiences of students attending university, and the challenges they face along the path to graduation. Among the survey findings, three key issues emerge prominently and serve as a framework for discussion:

- the impact of financial strain on student life;
- student success rates; and
- graduate attributes related to employability.

According to Professor Francois Strydom, director of the Centre for Teaching and Learning at the University of the Free State which conducts the student engagement surveys, while the South African higher education sector is undoubtedly negotiating tumultuous times, it is not alone in facing these particular challenges.

“In the United States, where the crisis of student debt is well-known, a study earlier this year<sup>1</sup> found that among 20,000 students in 35 universities across 14 states, 36% were food insecure, 36% were housing insecure and 9% were homeless,” he said.

Turning to the United Kingdom, he said a deeper understanding of the need to support student success had led to the formation of the Office for Students which has the primary task of setting up conditions in which students can thrive.

In a similar light, Universities SA’s Transformation Strategy Group has identified as a sector-wide project the design of universities that place our students at the centre; that take into account the lived experiences of our students.

On the issue of graduate employability, Professor Strydom said several studies in Africa and around the world have attempted to understand the perceptions of a wide ‘skills gap’ between graduates and the skills they need to enter the job market. Notwithstanding the fact that unemployment rate of university graduates in South Africa fluctuates between 4% and 12%<sup>2</sup>, concerns of the ‘skills gap’ have to be taken seriously.

“Against this global backdrop, the question is: How can we re-design our universities to tackle these three significant challenges as they manifest in our national context?” said Strydom. What is being suggested is that the design of our universities to maximise the overall development of our students can no longer be left to chance.

In this report, these challenges are explored through the lens of student engagement data, one of the only inter-institutional and longitudinal data sources available in the country. The aim is to assess the status quo, how institutions are responding and where the gaps are that require more attention.

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<sup>1</sup>Still hungry and homeless in college, report by the Wisconsin HOPE Lab.

<sup>2</sup>STATSSA Quarterly Labour Force Survey, July 2018.

## A data-informed student perspective

Student engagement is an internationally recognised construct and provides an integrated understanding of student and institutional behaviours associated with student success. It refers to how much time and effort students spend on academic and other personal development activities and it includes the way in which institutions allocate resources and organise learning opportunities and services to help students participate in and benefit from such activities. Understanding student experiences and performance has become increasingly important to restore public confidence in higher education<sup>3</sup>.

Data collected from two annual student engagement surveys – the Beginning University Survey of Student Engagement (BUSSE)<sup>4</sup>, which targets first-year students' high school experiences and expectations of their first year of study, and the South African Survey of Student Engagement (SASSE)<sup>5</sup>, which measures student engagement among undergraduate students (first years and seniors) – provide insight into the daily experiences and needs of students and provide a dataset that institutions can use to help reduce the stress carried by students and improve the success of students at all levels.

“The data bring an evidence-based student perspective to institutional planning and higher education policy development and allow institutions to promote effective educational practices which enhance student success and reduce inequalities in our societies,” said Strydom.

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<sup>3</sup>Kuh et al (2015). Using evidence of student learning to improve higher education. San Francisco: Jossey-Bass.

<sup>4</sup>The BUSSE survey is administered annually from February to March. Data used in this report stems from the 2015-2017 administrations, and includes 14,872 students from nine institutions (three traditional, two comprehensive, and four universities of technology).

<sup>5</sup>The South African Survey of Student Engagement (SASSE) is administered annually from August to September and measures undergraduate students' (first years and seniors) engagement. The SASSE data used for this report is from the 2015-2017 administrations, and includes 20,120 students from 12 institutions (one comprehensive, six universities of technology, and five traditional universities).



# 1. Finance

Data show that 70% of students at some point during the academic year cannot afford to buy food; 68% are unable to afford study materials; and 62% feel they could not afford to pay to participate in campus-based social and academic activities. All of these findings have obvious implications for the wellbeing and academic performance of students and, in the case of the latter, they raise concerns about inclusivity and equity in our universities.

The Financial Stress Scale, which was developed and added into SASSE 2016 in response to the #FeesMustFall protests in 2015, shows that in addition to the inability to meet basic needs, students experience high levels of anxiety and stress about money. This has been a well-known phenomenon at the historically-black universities and the universities of technology for more than 20 years.



While the aroma of fresh food on campus may indicate culinary accomplishment in Food Science and Dietetics students, to those outside these disciplines who study on an empty stomach, the smell of food can be distracting, to say the least. Up to 24% of our students contend with hunger daily. Photos: Courtesy of the University of Limpopo (left) and the University of the Witwatersrand.

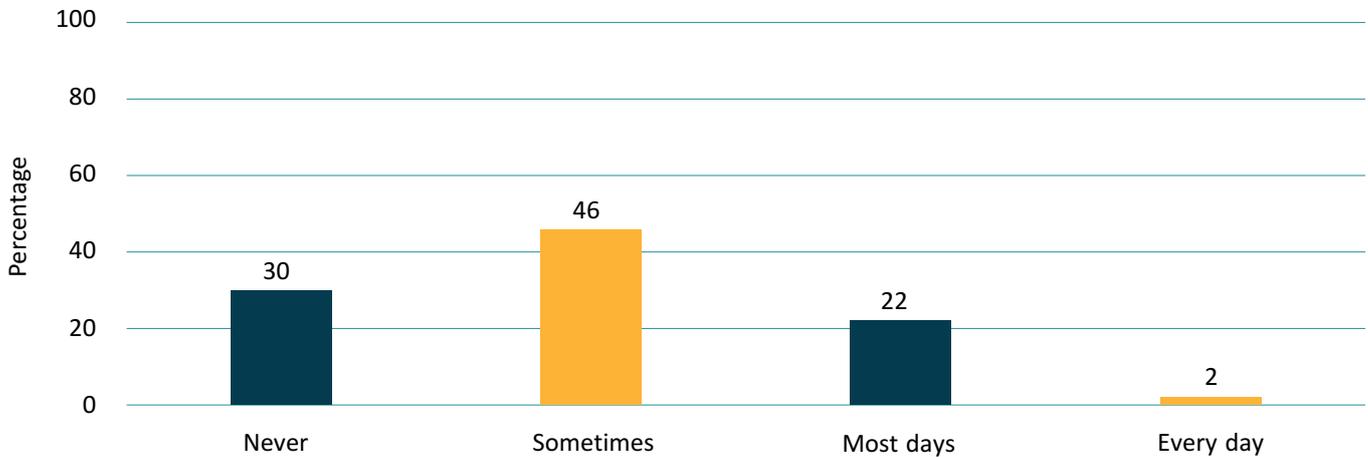
Almost a third of students say they worry daily about paying for university. Furthermore, the top two reasons given by students for considering dropping out are financial: 40% cite tuition fees as a potential reason for leaving university, and 30% cite living costs. Only 18% cite poor academic performance, but 20% cite a sense of not belonging. Safety concerns off-campus are also a consideration (19%). In the context that South Africa's graduation rates are between 50% and 62% depending on the programme of study, this data points towards the key causes. Recent research indicates that students who qualify for financial aid have a 7% better chance of completing a qualification in 'n+2' years<sup>6</sup>.

Despite the severity of the findings, the surveys point to high levels of resilience and determination among students with only just over half of students indicating that their financial concerns have had an impact on their academic performance. However, 44% of students who indicate that financial stress has impacted on their academic performance worry about paying for university every day.

The full set of findings and a short outline of their potential implications are set out in more detail over the next few pages.

<sup>6</sup>Van der Berg, S. (sine anno). Beyond expectations: progression of poor students through University. [https://www.google.com/search?ei=MISGW-nGAcecgAa0-LvoAQ&q=Servas+van+der+berg%2C+Focus&oq=Servas+van+der+berg%2C+Focus&gs\\_l=psy-ab.3..33i22i29i30k1.8151.15067.0.15812.14.9.0.0.0.0.525.1372.2-2j1j0j1.4.0....0...1c.1.64.psy-ab..11.1.524....0.jQ2EpWixpaM](https://www.google.com/search?ei=MISGW-nGAcecgAa0-LvoAQ&q=Servas+van+der+berg%2C+Focus&oq=Servas+van+der+berg%2C+Focus&gs_l=psy-ab.3..33i22i29i30k1.8151.15067.0.15812.14.9.0.0.0.0.525.1372.2-2j1j0j1.4.0....0...1c.1.64.psy-ab..11.1.524....0.jQ2EpWixpaM)

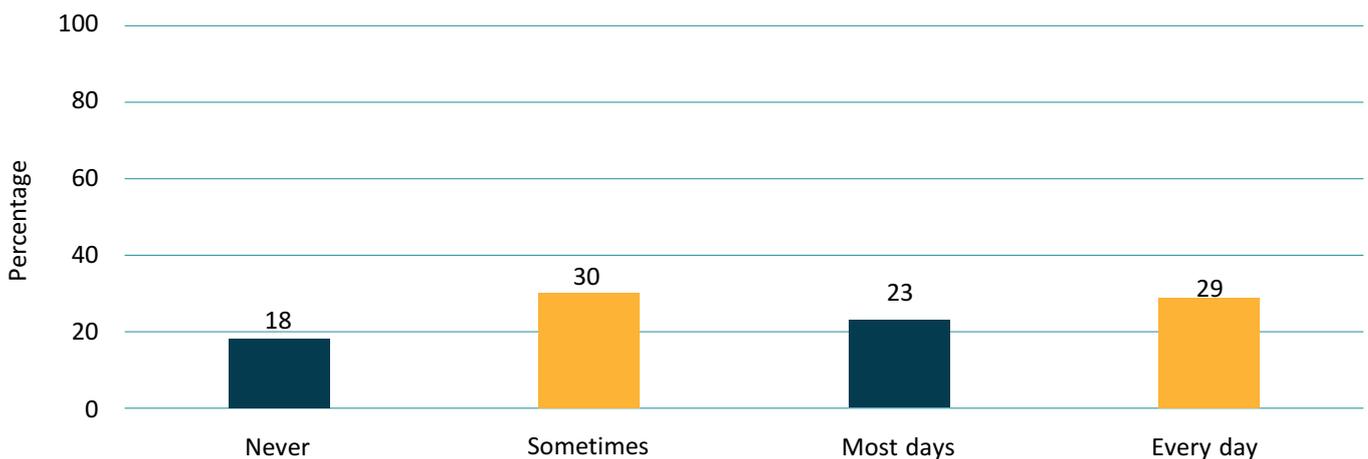
## ***In the past year, were there any times that you ran out of food and could not afford to buy more?***



**Figure 1**

*Less than a third of students indicate that they have never run out of food and were not able to buy more. That means that 70% of students have at some stage in the relevant year been hungry. For 24% of the sample, that happened most days or every day.*

## ***How often do you worry about paying for university?***

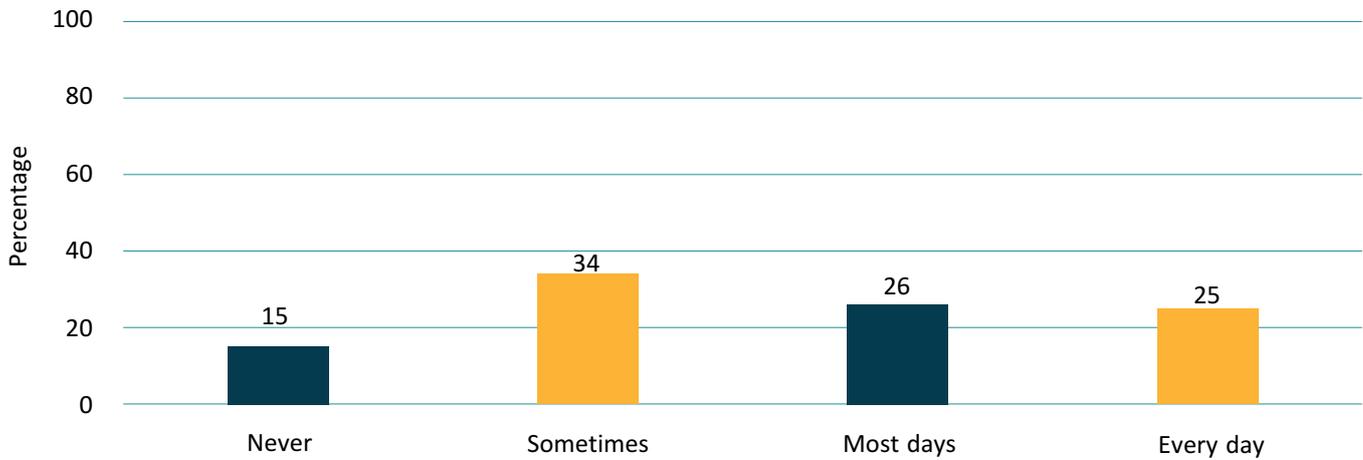


**Figure 2**

*Almost a third of students (29%) say that they worry about paying for university every day. Only 18% say they are unaffected by financial stress related to their university fees.*



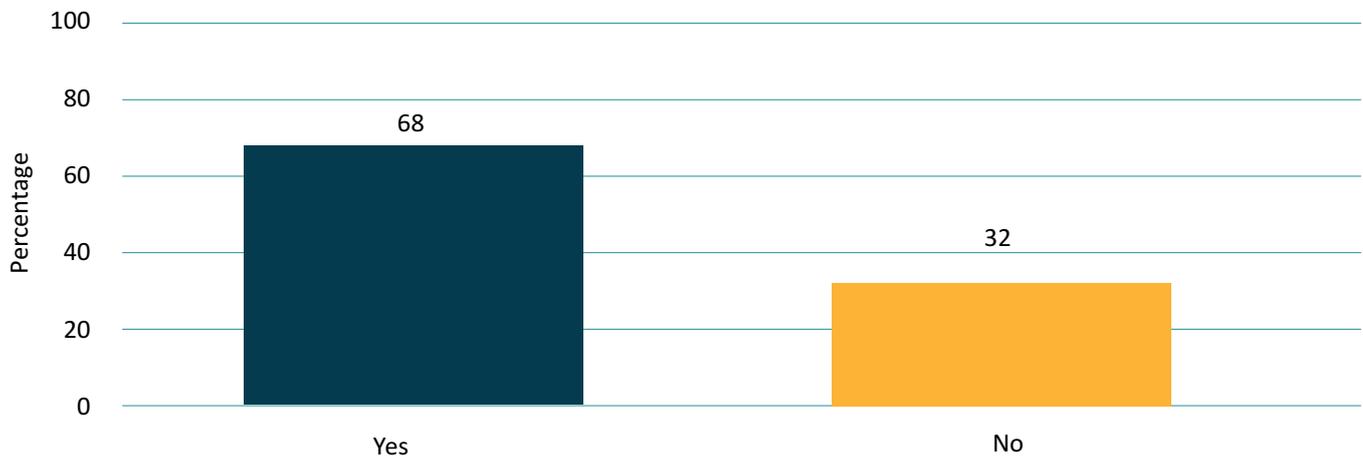
## How often do you worry about having enough money for day-to-day necessities?



**Figure 3**

Beyond tuition fees, 85% of students worry about having enough money for day-to-day necessities, with 25% of students saying that they worry about this on a daily basis.

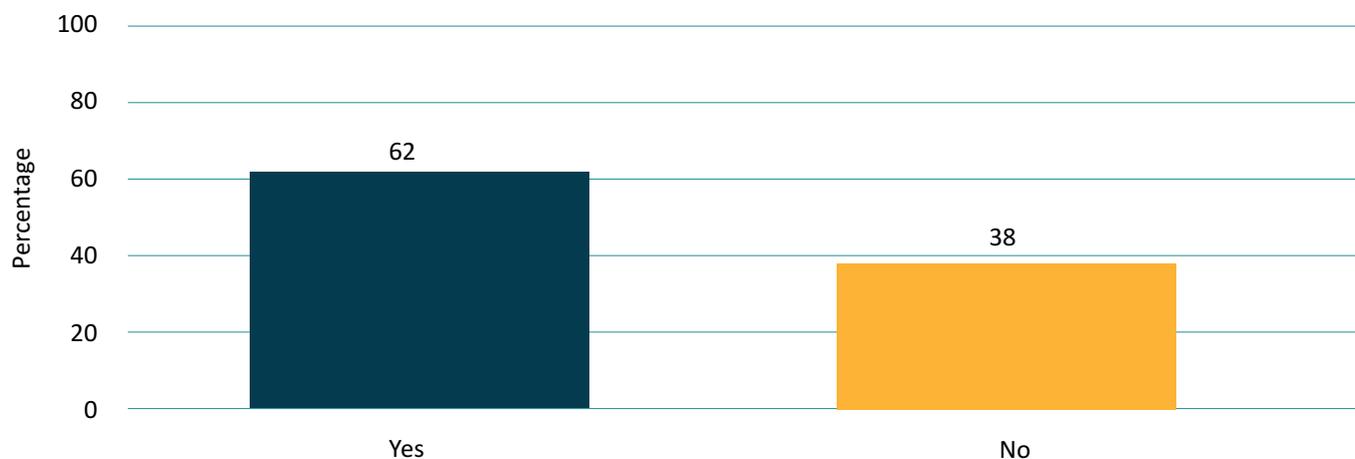
## I have chosen not to buy academic materials due to their cost



**Figure 4**

Two-thirds of students (68%) have neglected to buy academic materials because of the cost. This raises questions about the depth of learning that is possible and suggests that more urgent conversations are needed on open access resources.

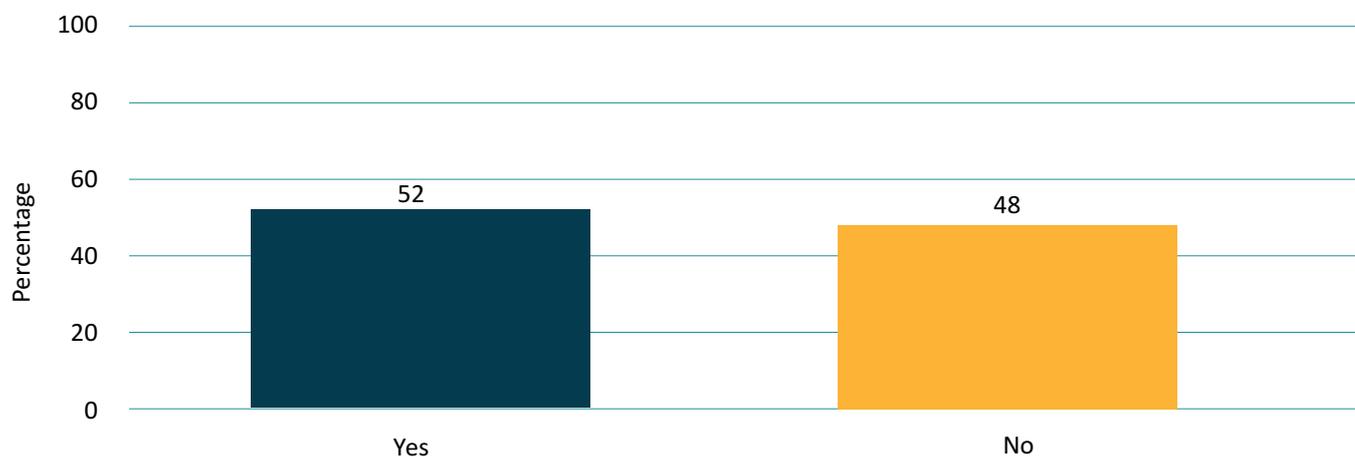
## ***I have chosen not to participate in academic or social activities on campus due to lack of money***



**Figure 5**

*Almost two thirds of students indicate that they have chosen not to participate in campus activities due to the cost involved. This finding has clear implications for our attempts to create transformed and inclusive institutions where students are able to freely interact with each other, both academically and socially.*

## ***Financial concerns have had a negative impact on my academic performance***

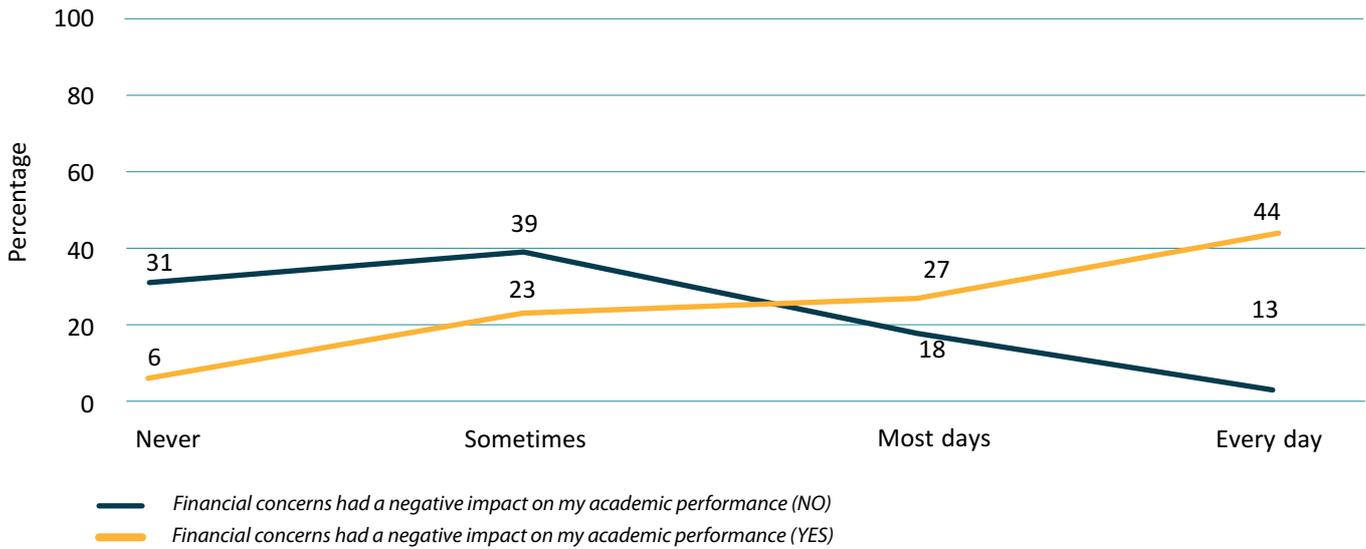


**Figure 6**

*Only around half of students indicate that their financial concerns have had an impact on their academic performance. This implies resilience and a sense of determination in that students seem to focus on their academics regardless of financial stress.*



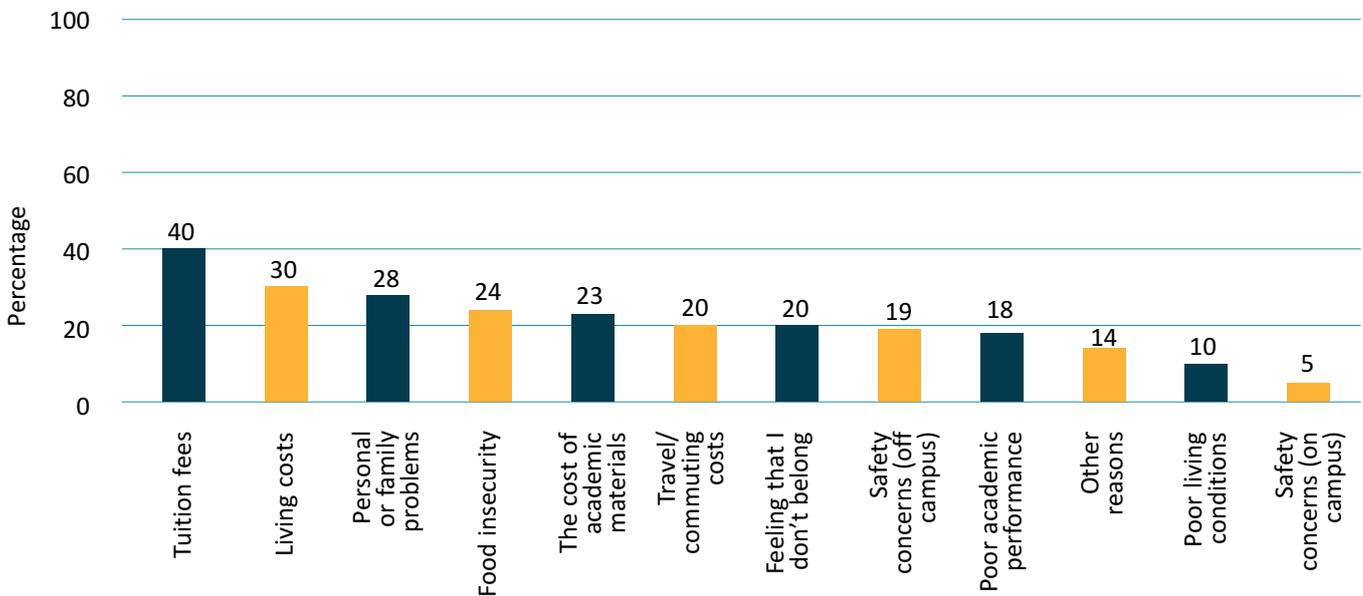
## How often do you worry about paying for university?



**Figure 7**

The more students experience financial stress, the more impact it has on their academic performance; 44% of students who indicate that financial stress has impacted on their academic performance worry about paying for university every day.

## I have considered dropping out of university because of the following reasons: (2016 + 2017; N=6 009)



**Figure 8**

The top two reasons provided for considering dropping out are financial (40% tuition fees and 30% living costs). Interestingly, 20% of students have thought about dropping out because they don't feel they belong.

## Progress and reflections:

One of the positive outcomes of the #FeesMustFall campaign has been the national recognition given to the plight of students and the need for increased funding for the sector in general. The implementation of free higher education for first-year students with lower household incomes from 2018 has widened access to thousands of students who would not necessarily have had the chance. Beyond national recognition, several innovative initiatives have been developed to help fund students' studies, including crowdfunding initiatives (e.g. <https://www.feenix.org/> or <https://fundafuture.co.za/>), and student-led initiatives to collect funds.

While many universities have had alternative funding mechanisms in place for some time, the protests and consequent data, such as the SASSE data on students' financial stress, have shed new light on the need to expand such initiatives.

The same applies to institutional feeding schemes. The fact that over 20% of our students are persistently hungry and the same proportion of students have considered dropping out because of food insecurity implies that even at those institutions which have made considerable efforts to run feeding schemes, the need outweighs the support institutions can provide. On this basis, a national feeding scheme may offer a solution.

While the intent is laudable, the implementation of free higher education has not been fully realised, with many students not receiving their promised funding in time. While interventions to streamline the NSFAS process are under way, the fact that 40% and 30% of students have considered dropping out of university because of the cost of tuition and living expenses respectively, combined with the clear link between financial stress and academic performance, the need for more holistic wrap-around support is clear.



## 2. Student success

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**Even though the majority of students entering higher education did not achieve an average of 70% or more for their high school studies, those are the marks they expect to achieve at university, according to BUSSE data. In addition, the biggest gap between first-year students' expectations and reality concerns non-academic support offered by universities. Understanding these expectations is a first step to designing institutional responses and support mechanisms to address the challenges they present for student success.**

Improving student success is one of the key challenges facing higher education institutions around the world today. Universities in particular are seen as engine rooms of human expertise needed to drive the knowledge economy and the 4th Industrial Revolution.

In South Africa, the Department of Higher Education and Training (DHET) has helped to focus attention on the need for universities to support student success through initiatives such as the University Capacity Development Programme (UCDP) launched in January 2018 with a budget close to R1 billion.

Understanding the student experience is a critical first step to designing institutions and programmes which enhance student success.

### 2.1 Transition – grappling with the 'Freshman Myth'

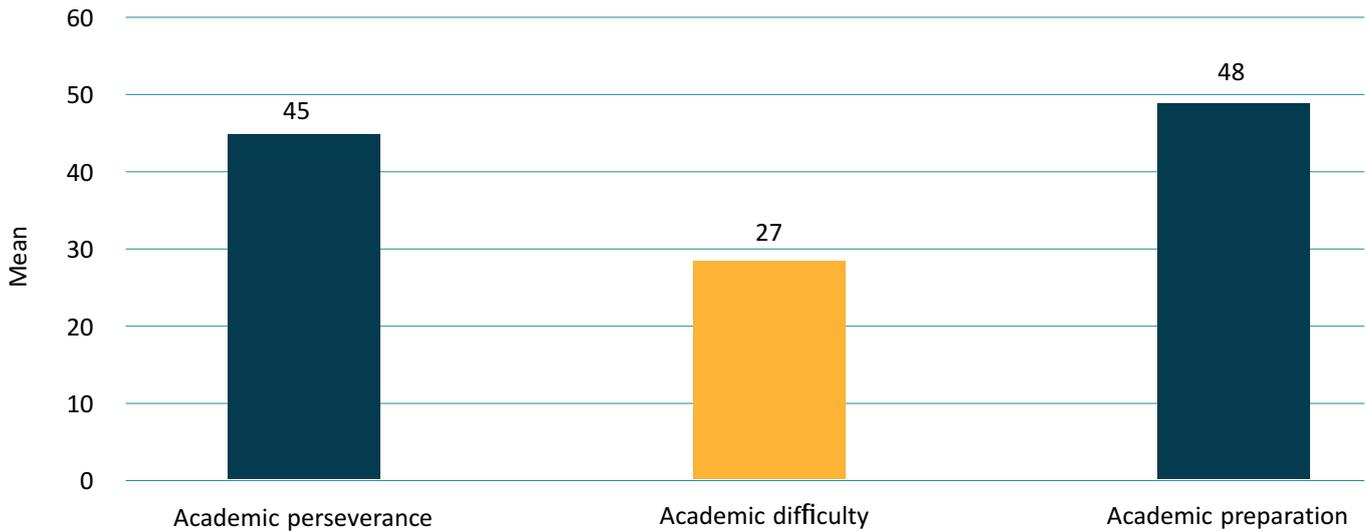
Even though the majority of students entering higher education did not achieve an average of 70% or more for their high school studies, those are the marks they expect to achieve at university, according to the data.

The disjuncture between student expectations and reality is not unique to South Africa and is captured by the term “the Freshman myth”, coined in the United States in the 1960s to refer to the phenomenon of students overestimating their own abilities and underestimating the difficulties faced at college.

As a result of this phenomenon, the transition into higher education, especially from secondary school, is a large field of study in higher education research because it marks a potential weak point in the academic path of a student. For decades, universities have been developing interventions to help students bridge the gap between school and university.

The BUSSE and SASSE data set out below confirm that students need greater support from their institutions in particular areas in order to successfully deal with the transition from school to university – and possibly in a way that capitalises on our students' optimism, perseverance, resilience and determination to succeed.

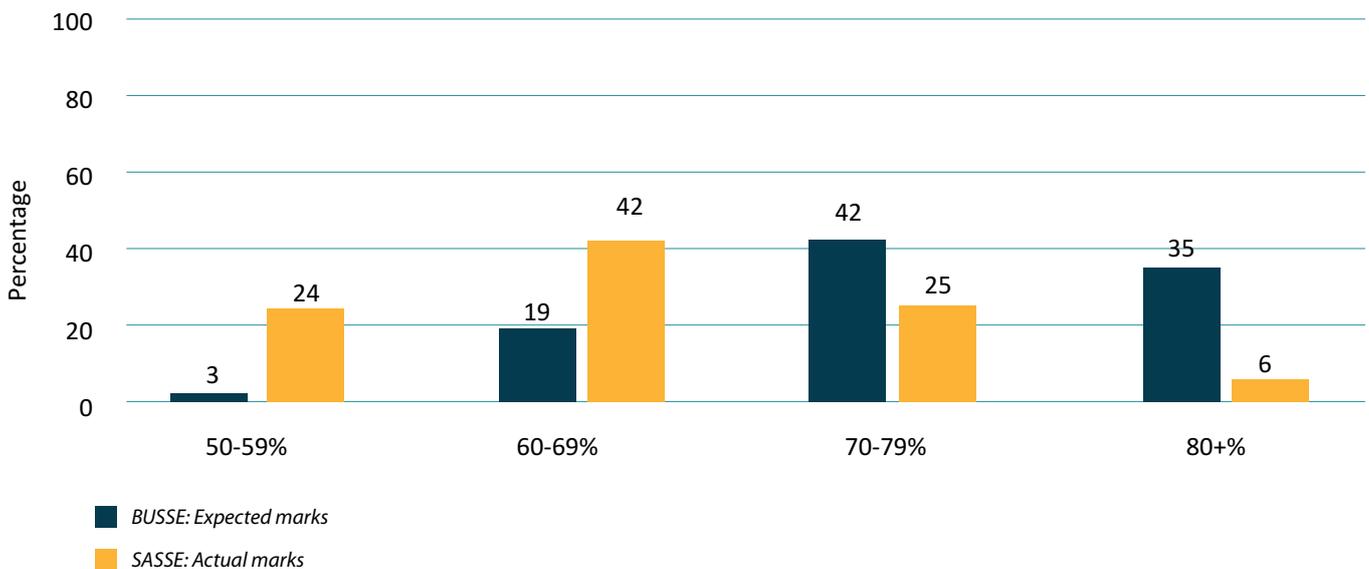
## Perceived preparedness vs. expected difficulty



**Figure 9**

The figure above shows a significant gap in students' perceptions of their academic preparation and sense of perseverance when compared to the difficulties they expect to encounter in their first year of study.

## Expected vs. actual self-reported marks



**Figure 10**

The majority of entering students expect to achieve more than 70% in their first year of study. However, less than a third achieve these marks.

### Progress and reflections:

Several examples of programmes or interventions to aid students' transition exist in different forms in South Africa (e.g. <http://www.sanrc.co.za/FYEGoodPracticesGuide2.pdf>). The establishment of the South African National Resource Centre for first-year students in transition also reflects a broader recognition of the importance to help first-year students adjust their expectations and successfully navigate the first year of their studies and these need to continue and perhaps be expanded.

We also need to focus our efforts beyond the university: at the schools from which our students are drawn. While most universities have some relationship with feeder schools, a greater focus on assisting those schools with academic and career advice is likely to have a positive effect on managing entering students' expectations as well as assist students in making more appropriate academic career choices.





*Universities' support programmes to their feeder schools need to focus on academic and career advice with a view to guiding learners' career choices while also managing the young aspirants' expectations of higher education. Photo: Courtesy of the University of Limpopo.*

## 2.2 Students' perceptions of institutional support

Another unmet expectation on the part of students relates to institutional support. Our data shows that there are large gaps between the support – both academic and non-academic – that students expect to receive from their institutions and what they actually feel the institution places emphasis on.

While more than 90% of students entering university feel it is important that their institutions provide academic support and encourage them to make use of learning support services, only 74% and 79% respectively feel that their institutions emphasise academic support in these areas.

As is apparent from Figure 11, this perceived gap between expectation and reality is particularly true regarding the management of students' non-academic responsibilities, which include their financial and personal challenges.

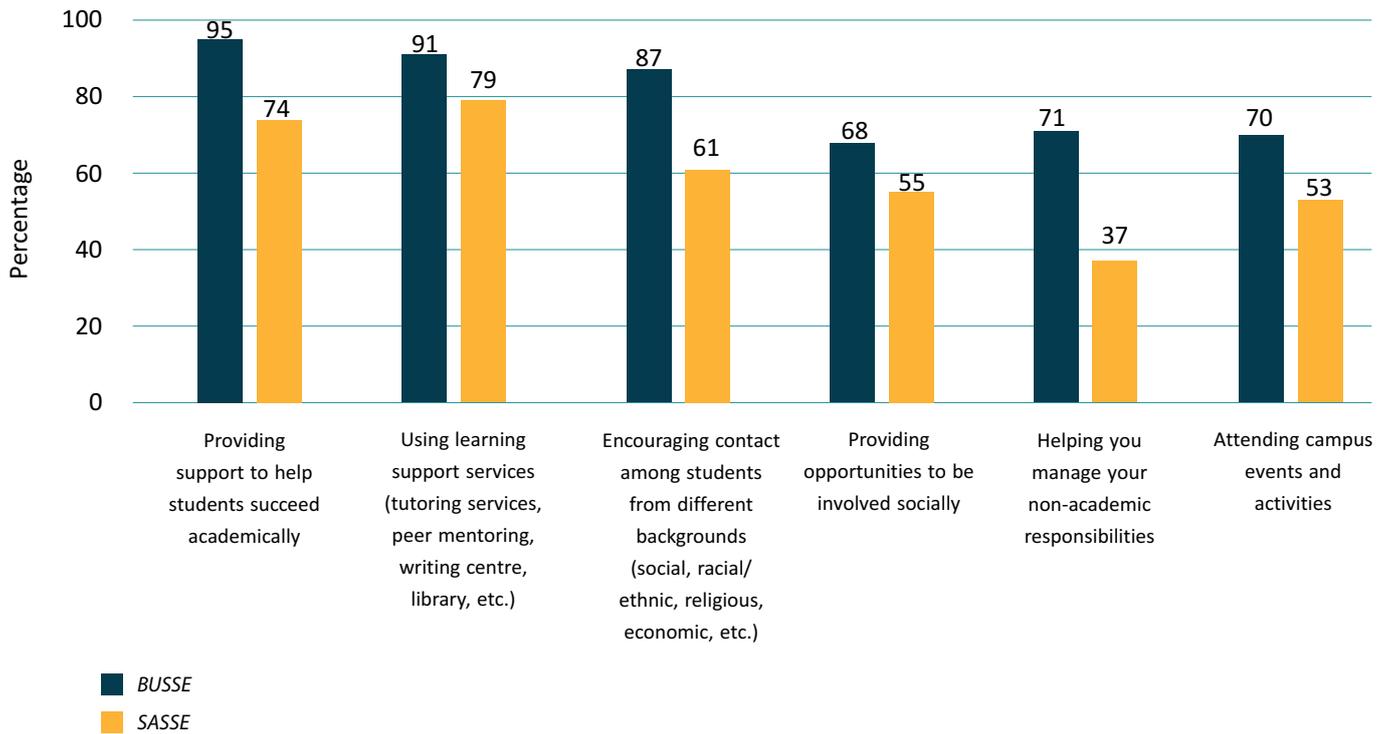
As can be seen, the biggest gaps between students' expectations and reality relate to whether institutions help students manage their non-academic responsibilities (34%) and encourage contact between diverse students (26% gap).

According to SASSE data, personal challenges are cited (by 28% of students) as being a reason for considering dropping out of university. This makes it the third-ranked reason given by students for possibly leaving their university.

Students' perceptions of support at the university play a critical role in their ability to persevere in spite of challenges and, importantly, in their developing a sense of belonging. Thus the BUSSE asks students how important it is that the university provides support for them in different areas, while the SASSE asks whether students feel their institutions place emphasis on different areas of support.

Figure 11 below shows a comparison between students' expectations and their reality.

## **Supportive Environment items**



**Figure 11**

### **Progress and reflections:**

The demographic transformation of institutions is happening much faster than changes to institutional culture. The data show that almost two thirds of students have chosen not to participate in academic or social activities on campus because of a lack of money and only just over half of students feel that their institutions are encouraging them to engage socially or attend campus events by creating opportunities for these interactions. Further, only 61% feel that institutions are encouraging contact with diverse others.

The data provide evidence of the need for a more holistic approach to student support. While all universities have divisions, offices, and dedicated personnel to deal with student finances, health, counselling and mental health, disabilities and special needs, academic and/or career advising, and other support/developmental structures to some extent, not many of these structures are housed in the same divisions or are able to link databases to determine the interrelationships between these structures for specific students. In other words, we do not know whether students who need to make use of multiple support structures are getting the support they need.

One response to this challenge is the Kresge Foundation funded Siyaphumelela project, coordinated by the South African Institute for Distance Education (SAIDE). The three-year project aims to empower five participating universities to develop institutional research, internal and inter-institutional collaborations, and data analytics aimed at helping students succeed. The use of data analytics helps to better calibrate institutional support to individual student needs. An example of such a system is the Nelson Mandela University's RADAR Detection System for Student Success which facilitates the early identification of struggling students<sup>7</sup>.

An institutional intervention intended to help create a sense of belonging is the LLL (Listen.Live.Learn) programme hosted by the University of Pretoria, which provides residential students with opportunities to engage in dialogue and discussion.

<sup>7</sup><http://tl.mandela.ac.za/News/RADAR-Detection-System-for-Student-Success>



## 2.3 Institutional relationships – A worrying decline

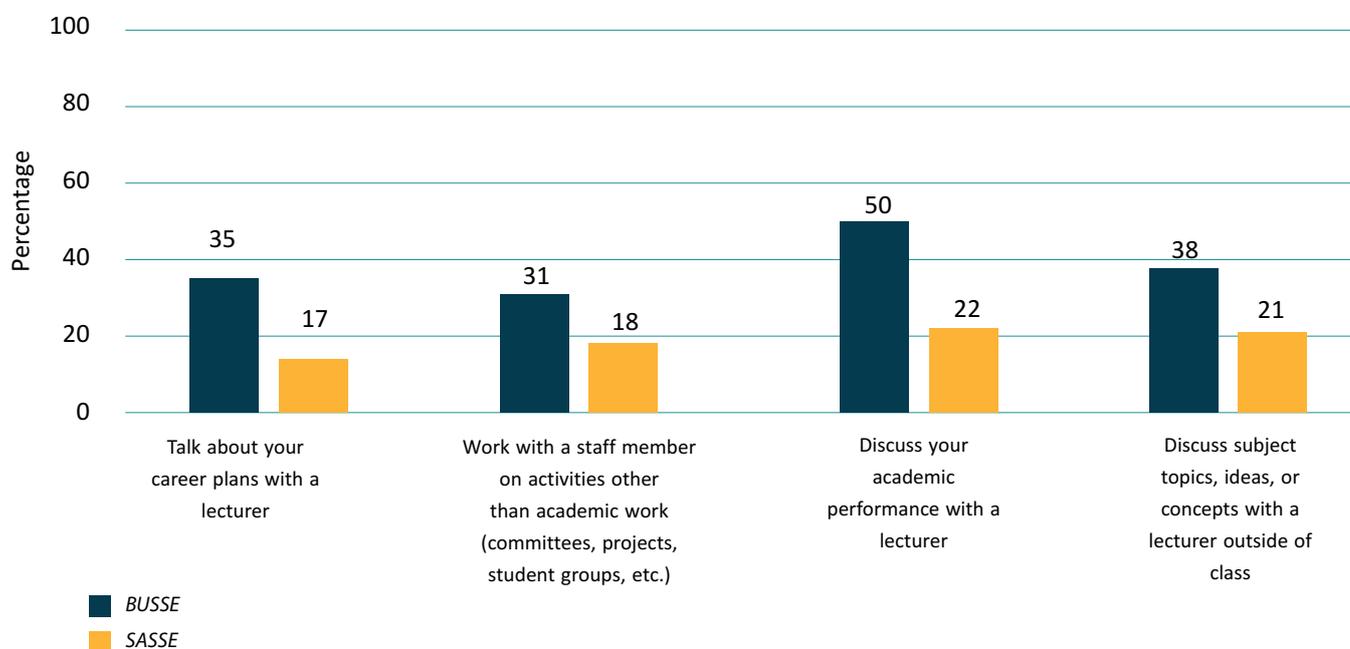
The interaction between students and their lecturers beyond the classroom has been found by researchers around the world to be an important contribution to engagement and success. This is also true in the South African context (e.g. Kinzie, Strydom & Loots 2017)<sup>8</sup>.

Given its importance, the fact that the BUSSE and SASSE surveys depict a decline in relationships between students and between students and lecturers – largely because of the #FeesMustFall protests and consequences thereof – is particularly concerning.

The data show that entering students do not expect to spend much time interacting with their lecturers beyond the classroom, although half of them do expect to at least discuss their academic performance with their lecturers.

In reality, less than a quarter of students indicate that they do in fact discuss their academic performance with their lecturers and only around 20% talk about career plans, other topics, or work with their lecturers on projects.

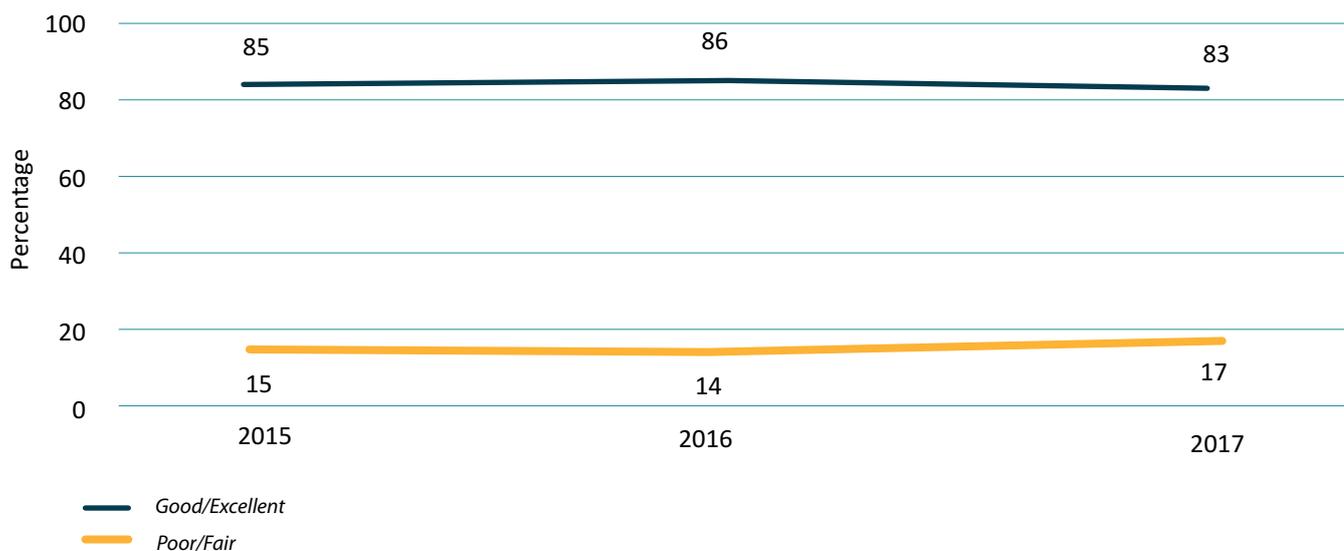
### *Student-Staff Interaction items*



**Figure 12**

<sup>8</sup>Kinzie, J., Strydom, F. & Loots, S. 2017. Promoting pedagogical practices that matter. In F. Strydom, G. Kuh & S. Loots, Engaging students: Using evidence to promote student success. Bloemfontein: SunPress.

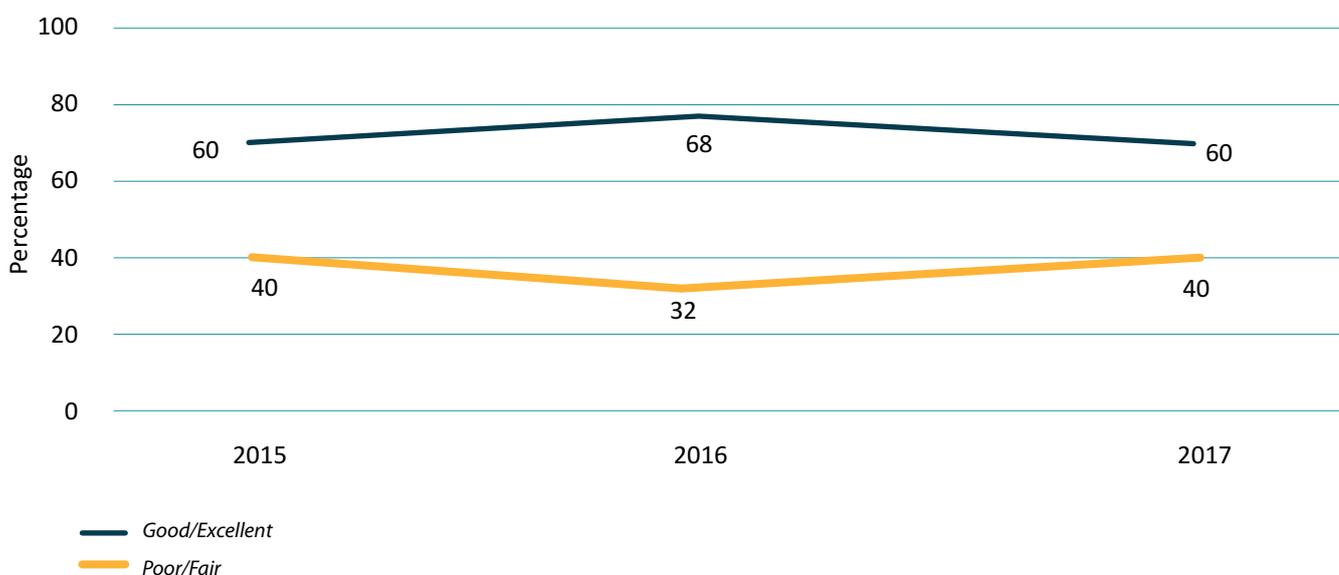
## Indicate the quality of your interactions with the following people at your institution: Other students



**Figure 13**

The SASSE data show a slight decline in students' relationships with other students from 2016 to 2017. In general, between 60% and 70% of students indicate that they have good or excellent relationships with their lecturers. The quality of relationships with lecturers show some fluctuation and might differ significantly between institutions.

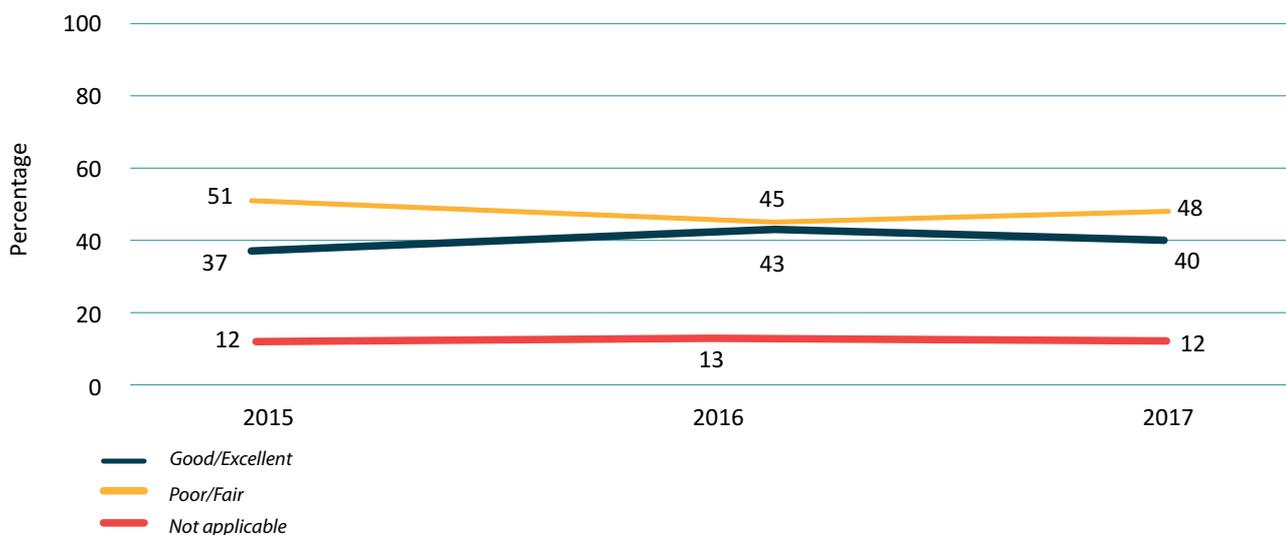
## Indicate the quality of your interactions with the following people at your institution: Lecturers and academic staff



**Figure 14**



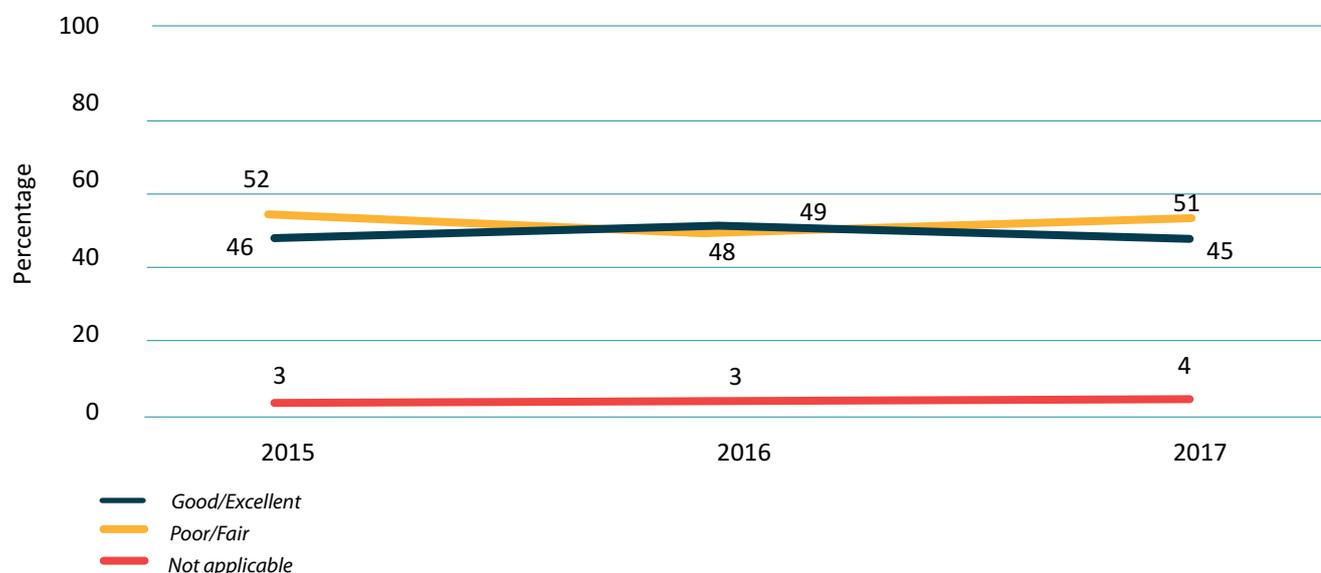
## Indicate the quality of your interactions with the following people at your institution: Student support services (e.g. counselling, health, disability, career)



**Figure 15**

Figure 14 and 15 show a decrease in the quality of interaction between students and academics and with staff in support services, respectively. A decline in the quality of interaction with academics can result in more strained classroom interactions which negatively affect vital interaction such as engaging in debates and asking and answering questions – all of which directly contribute to the development of critical thinking. The decline in the interaction between students and support staff might mean that students are less inclined to make use of the support services intended to support them through challenging times.

## Indicate the quality of your interactions with the following people at your institution: Other administrative services (e.g. registration, financial aid)



**Figure 16**

The decline in the quality of interaction between student and administrative staff suggests that navigating difficult conversations around delays in student funding might be more difficult as well as finding ways to help plan alternatives if students are not able to register or continue their studies.

### Progress and reflections:

More conscious efforts to rebuild relationships between students/staff/management need to be made while Centres for Teaching and Learning need to focus more keenly on supporting and empowering lecturers to use innovative teaching and learning and create engaging environments.



## 2.4 High-Impact Practices

Through SASSE data it has been established that students who have participated in high-impact practices – scaled interventions targeted at students’ optimal development which take place throughout their undergraduate career – show significantly higher mean scores on almost all the engagement indicators. Although this does not indicate a causal relationship, it does imply that students taking part in HIPs are more engaged in other educational experiences.

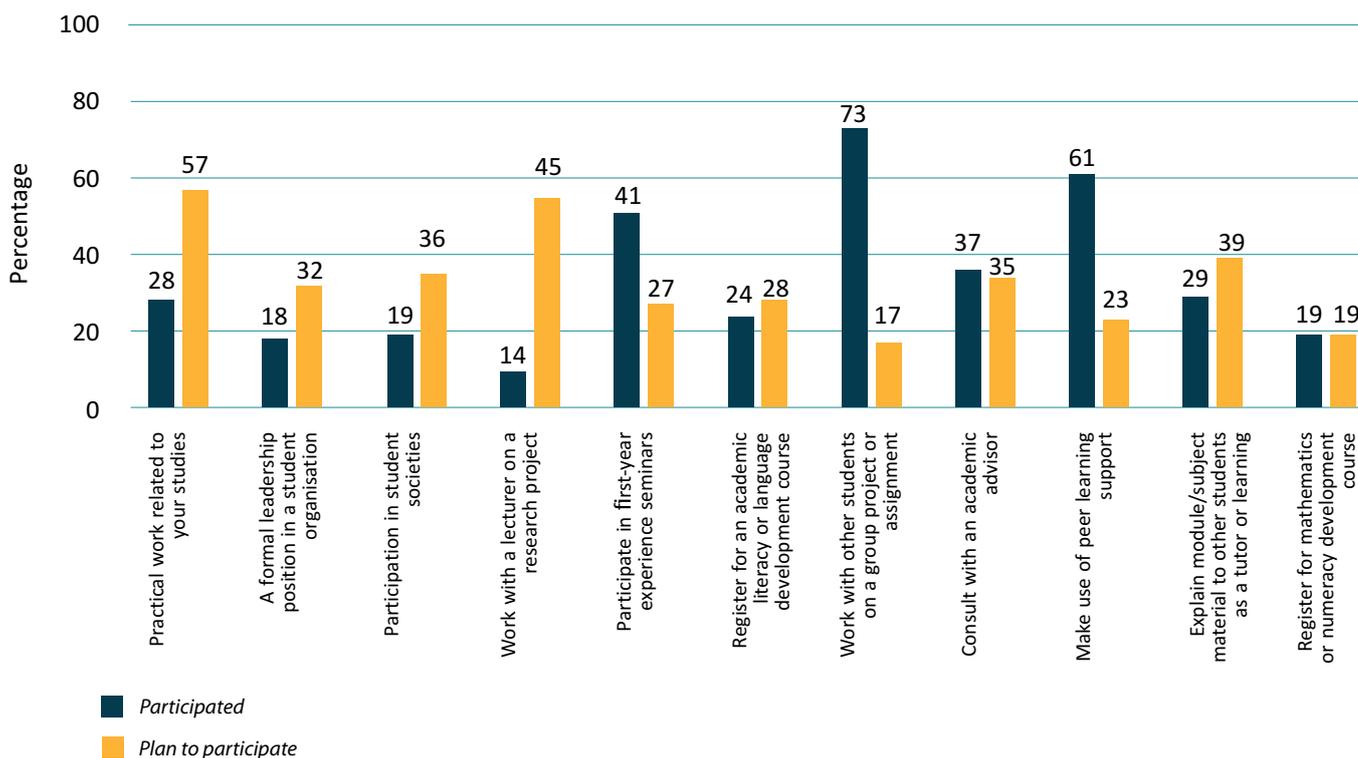
Requiring considerable time and effort on the part of staff, HIPs nevertheless have been shown to benefit students, helping them to learn outside of the class and interact with lecturers and diverse others and also provide feedback to students.

Through consultation with participating universities, a list of potential high-impact practices (HIPs) for the South African context was developed and included in the SASSE.

Figure 17 below shows students’ level of participation in the measured HIPs as well as an indication of whether students are still planning to take part in these practices. The two HIPs students take part in most frequently include group work as well as peer learning support services.

Institutional efforts to ease student transition from high school have given rise to different forms of First Year Experience (FYE) programmes. While 41% of students indicate that they have taken part in such programmes (which includes orientation programmes), it might be the case that institutions and students are not yet talking the same language – i.e. students do not realise that what they are doing or have done forms part of a deliberate effort to help them transition in their first year.

### ***Participation in High-Impact Practices (HIPs).***



**Figure 17**



According to our data, students who indicate that they have enrolled for a numeracy course (as a HIP), show a significantly higher mean score on the Quantitative Reasoning indicator (with a moderate practical significance of 0.43). Students who have taken up leadership positions, participated in student societies, conducted research with staff members, provided academic advice or have tutored all show much higher scores on the student-staff interaction indicator, with moderate to large practical significance.

### Progress and reflections:

These results emphasise how important it is for HIPs to be incorporated in the design of the undergraduate curriculum and it is encouraging to note that more and more examples of institutions developing and implementing HIPs are being seen. Among these is the scaling and development of supplemental instruction at Nelson Mandela University, a student academic assistance programme that has been running for over 20 years and has trained over 360 coordinators. At the University of the Free State, the Academic Student Tutorial Excellence Programme (A-STEP) programme has almost 350 tutors and is reaching more students every year. The A-STEP programme also has a strong focus on data analytics and has found strong relationships between students' tutorial attendance and their academic success.



*The University of the Free State's A-STEP Programme, with almost 350 tutors, has found strong relationships between students' tutorial attendance and their academic success. Tutors are here playing The Finish Line board game to better understand the student experience. Photo: Courtesy of University of the Free State.*

The University of Pretoria has a good example of a learning community programme, where first-year students in need of support are grouped and assigned to a peer mentor. The learning community provides academic and social support and development for the incoming students, and also provides a platform for development for the student mentors. Other peer mentoring programmes examples are from the University of Johannesburg and Central University of Technology. Several universities (e.g. Stellenbosch University, Tshwane University of Technology and the University of the Free State) provide reading and writing support for students (and staff in some cases) by providing consultants or specialised programmes.

Almost all universities offer either student-led or institution-led societies or organisations, which provide a space for students to engage with others on academic or non-academic issues. The University of Cape Town, for example, has more than 100 such societies and organisations.

Regarding First-Year-Experience (FYE) programmes, although most universities have some sort of first-year transitional programmes, orientations, modules, seminars, or other initiatives, a few institutions, such as the University of Cape Town and Cape Peninsula University of Technology are actively using and promoting the term FYE. Most universities have some form of career and/or academic advising and/or counselling; however, recognition of the need for conceptual development of academic advising in the national context should help advance advising as a HIP.

A collaborative University Capacity Development Grant (UCDG) has been awarded to seven national higher education institutions over a period of three years to drive a contextualised theoretical understanding of advising as a holistic developmental practice to promote professional practice, and to allow institutions to work collaboratively in advancing research and development in advising within South Africa. A recent report published by the UFS also shows the significant relationship between academic advising, student engagement and academic performance<sup>9</sup>.

Taken together, there are many more examples of the efforts the higher education community – including students, staff and management, as well as external stakeholders – are making to help students successfully navigate their studies.

While at a national level, the UCDG is intended to intentionally create environments which support student success across the system, the focus on scaled interventions to reach more students should be developed. There is also a need to be more intentional about creating wrap-around support for students; the fact that certain HIPs enable, for example, students and staff to engage more with each other could allow for more nuanced development of such HIPs to specifically target weaker areas.

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<sup>9</sup>Creating pathways for student success: Academic advising and student engagement  
<https://www.siyaphumelela.org.za/documents/5b30f4f776a1b.pdf>



# 3. Graduate attributes

**Undergraduates in South Africa show limited higher-order learning progression during their degree and many struggle to apply their learning to broader societal challenges. These findings have implications for the kind of student leaving our universities and entering the workplace. They are some of the factors that support the national attention currently being given to decolonisation and redesign of academic curricula.**

Around the world, the production of knowledgeable and skilled professionals is increasingly regarded as essential for national economic growth and universities obviously have a direct responsibility in this process. But are they producing the “right kind” of graduate? Increasingly, industry employers in South Africa and elsewhere are reporting a “mismatch” between what graduates are taught at university and the skills required in the workplace. Desirable graduate attributes include not only a sound knowledge base or technical expertise, but less tangible attributes such as communication skills, an ability to work in teams and to use one’s initiative. The emergence of global employability rankings is one indication of the importance being placed on employability – not only by institutions, but by students themselves.

According to the survey data, there is more focus during the undergraduate degree on application rather than development of analytical skills and creating new knowledge. There is also limited engagement with diverse perspectives in the academic material supplied to students, and many students are not connecting what they learn – either to other subjects or to broader societal challenges.

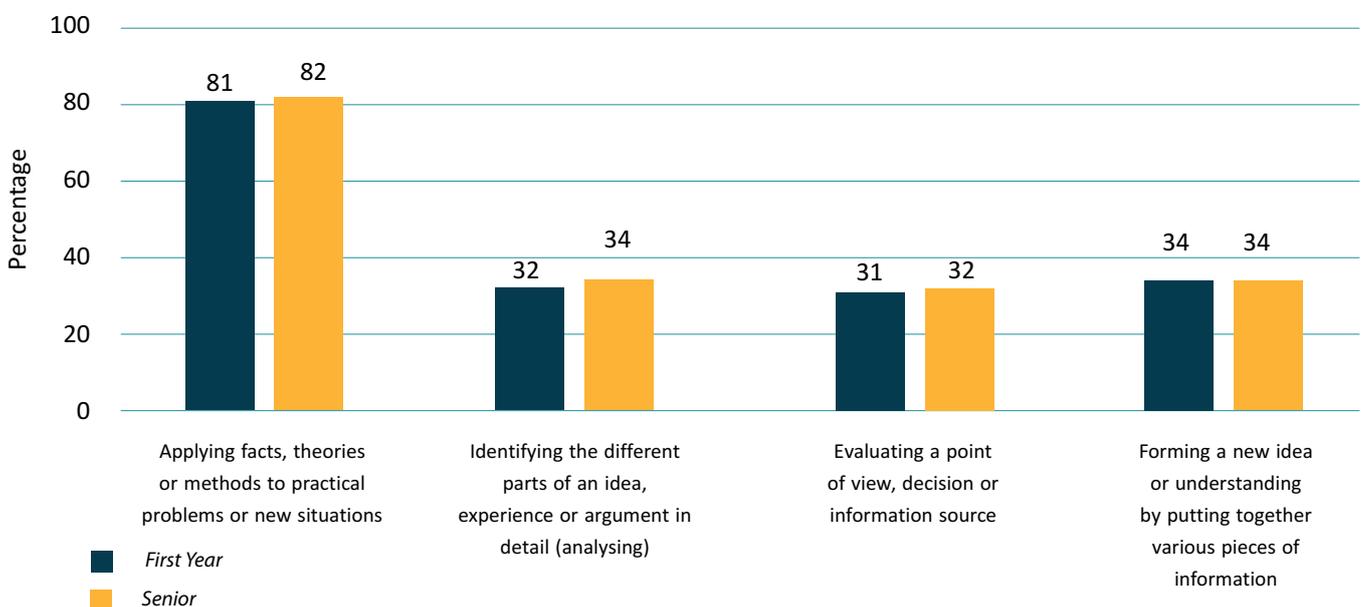
These findings imply a lack of progression from application to creation as part of students’ higher-order learning, pointing to a lack of ‘bigger picture’ analyses of curricula. It also, to some extent, supports the national concern with decolonisation of academic curricula.

In a perfect world, the intensity of students’ engagement with knowledge would increase with their study years until they are able to contribute to the existing knowledge body in a meaningful way. However, if students are primarily taught how to apply knowledge without much focus on synthesising, evaluating or creating knowledge, it also affects other desired outcomes, such as innovativeness and entrepreneurship.

For the purposes of assessing graduate attributes, the SASSE measures students’ sense of Higher-Order Learning – an indicator based on Bloom’s Taxonomy; and Reflective and Integrative Learning – focusing on students’ ability to give practical meaning to their studies. Both these indicators talk to the quality and depth of students’ engagement with knowledge.

## 3.1 Deep learning

### **Higher-Order Learning progression: first-year vs. senior undergraduate students**

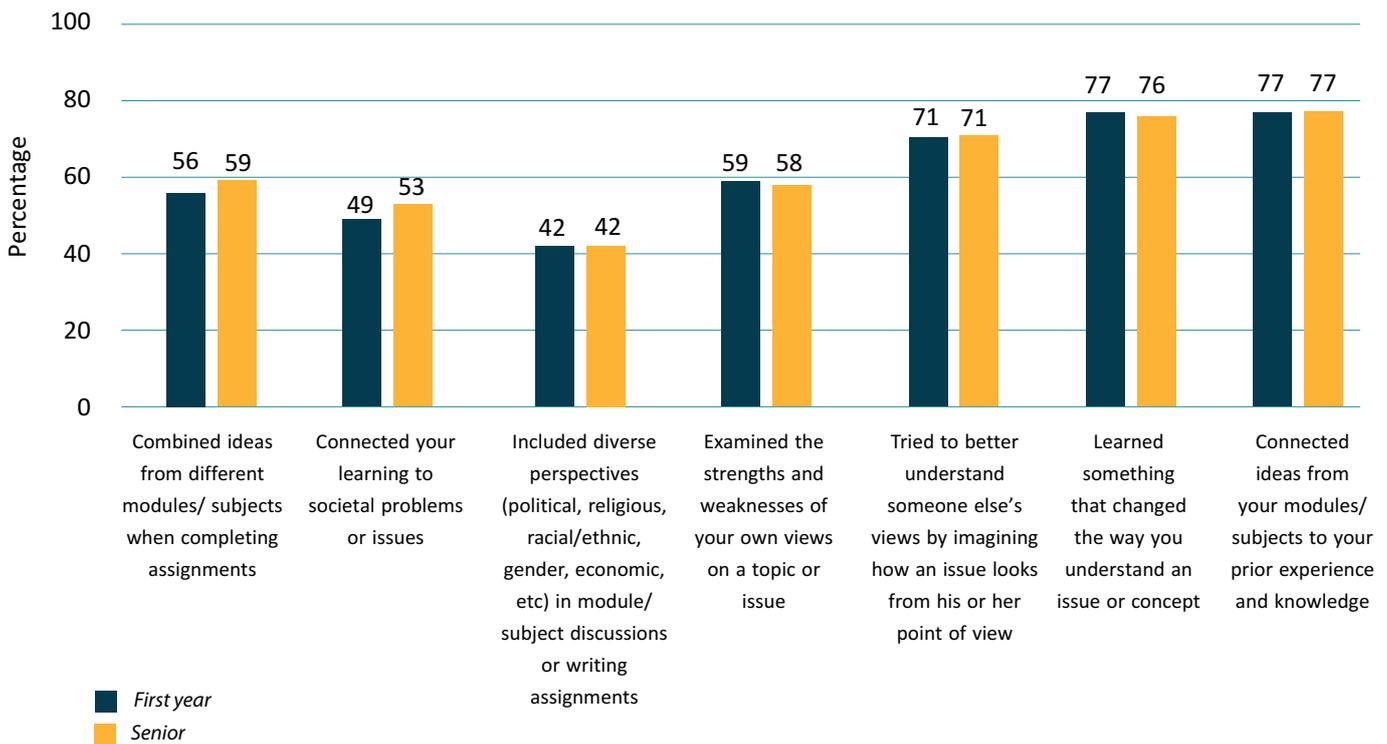


**Figure 18**



When looking at first-year and senior students' experiences one would expect a build-up from application to creation according to Bloom's taxonomy, as well as a build-up from year one to senior years of undergraduate studies. However, SASSE data show a strong focus on application, with little focus on any of the other higher-order skills. Further, there are very small differences between first-year students' experiences and senior students' experiences.

## **Reflective and Integrative Learning**



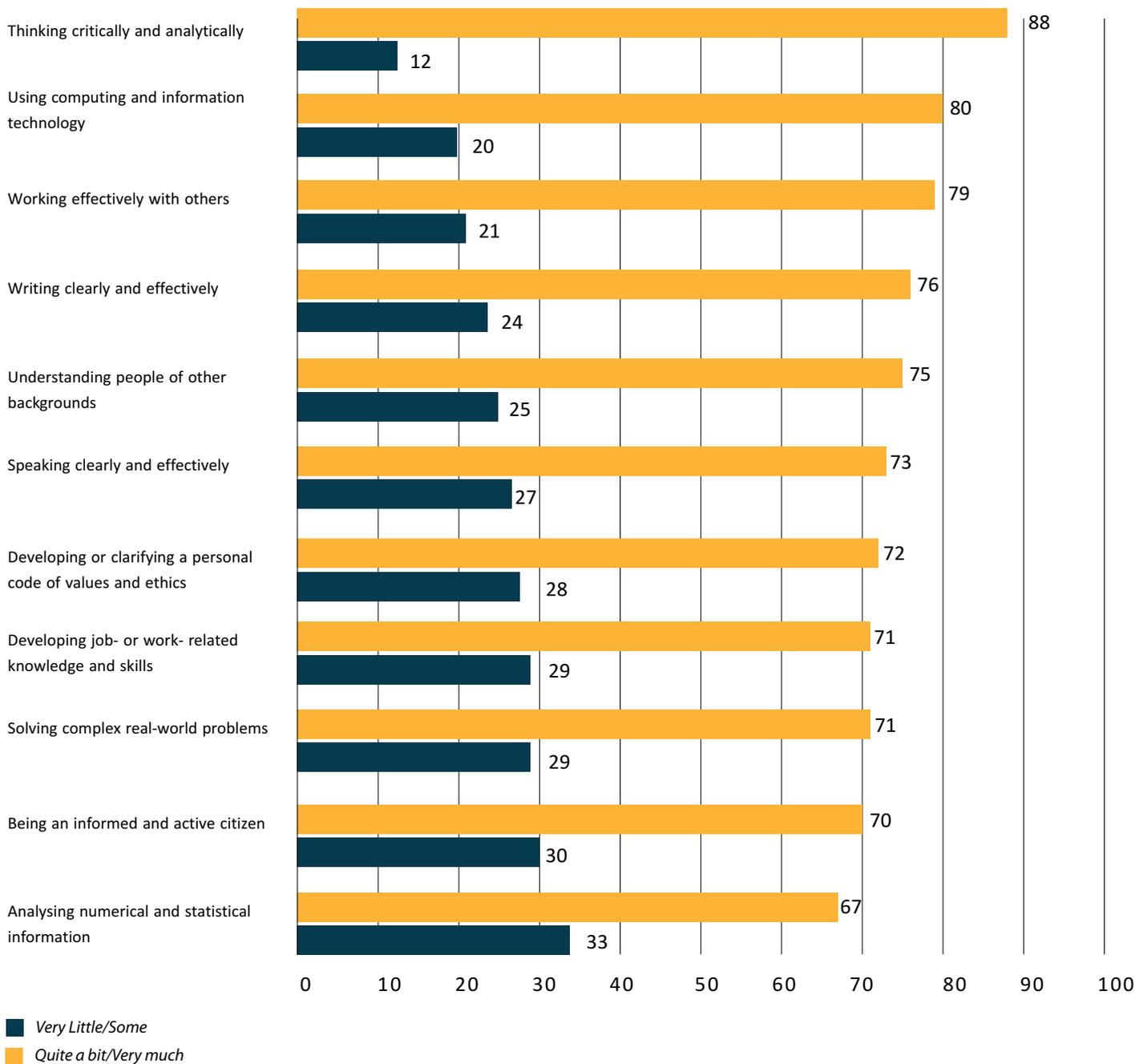
**Figure 19**

A similar pattern is seen in students' engagement with reflective and integrative learning. There is little difference between first-year and senior undergraduate students' experiences. A worrying trend is the limited engagement with diverse perspectives in academic material, as well as the linking of learning to other subjects and, beyond higher education, to broader societal challenges.

The data from Figures 18 and 19 highlight the importance of developing curricula that are relevant to the South African context and giving academic staff the tools to develop creative learning environments. Engaging classrooms and online learning environments help students develop higher order skills that will be critical in the 21st century world of work where technology and machines are set to take over lower order tasks.

## 3.2 Perceived gains

### Perceived gains



**Figure 20**

The SASSE data show that more than 80% of students feel they have developed critical and analytical thinking skills at university as well as an ability to use computing and information technology. Analysing numerical and statistical information is perceived by students as the least developed skill, with a third of students indicating they have not developed this skill. Almost 30% of students do not feel that they have developed job or work-related skills. A similar fraction feel they have not learnt how to be informed and active citizens.

Although the data show that students feel that they are developing important critical and analytical skills, the findings challenge the sector to look at how it can develop the kind of citizen South Africa will need in future.

## Progress and reflections:

Several universities have publicly stated the graduate attributes they seek to produce. For example, the University of Mpumalanga includes, among others, the development of lifelong learners, the importance of disciplinary knowledge, innovativeness, effective communicators, graduates who are ethically and socially aware, and who are change agents. The Central University of Technology aims to develop socially and environmentally conscious citizens who are innovative and entrepreneurial, who are able to solve problems, are technologically literate, numerate, efficient communicators, and who are able to work in teams.

What these and other examples of graduate attributes have in common is the emphasis on knowledge and other skills. Several institutions have started to develop co-curricular programmes or workshops to help develop skills associated with employability. For example, Cape Peninsula University of Technology has developmental workshops to help students develop public speaking and networking skills, and navigate meeting procedures. Another example is from the University of Johannesburg, which offers learning development workshops, such as critical thinking, managing anxiety, reading and cognition skills, as well as online academic development workshops, such as language development or institutional navigation.

National policy documents refer to the important role higher education plays in developing good citizens. Even though most if not all universities have some components of community service learning or community projects, and over 60% of this sample indicate that they engage with service learning through at least some of their modules, these values need also to be reflected more thoroughly in the broader curricula.

The engagement data tell us that around 70% of students feel that they have developed a sense of citizenship, a personal code of ethics, and that they can solve real world issues respectively. We also know that of those who indicated that all of their modules have at least some component of service learning, 85% feel that they have developed a personal code of values and ethics, 84% feel that they understand people from different backgrounds better and are able to take on complex social problems respectively, and 81% feel that they have developed into informed and active citizens. There is an approximate 20% difference between these students and those who do not have any modules with service learning components. These values could be extended to include the other 30% of students through incorporating more service learning partnerships, as well as developing more community partnership programmes of which students could form a part.

Beyond institutions, the Labour Market Intelligence Partnership between the Department of Higher Education and Training and the Human Sciences Research Council are working to create a labour market intelligence framework which would allow a better fit between the skills required by the labour market and the skills and knowledge in which we are training students. Another example is the South African Graduate Employers Association, which aims to connect graduates with employment opportunities.

More focus might be needed to form better relationships between industry and higher education to keep the alignment between changing career requirements as well as new developments in knowledge fields. Institutions could also focus more on the development of co-curricular programmes through high-impact practices aimed at intentional development of generic skills desired by workplaces.



## 4. Concluding remarks

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**While students' behaviours, agency and motivation are important contributors to their levels of engagement, creating an educational environment that enables students to actively engage constitutes the foundation of student success.**

As can be seen from the reflections at the end of each of the three sections, institutional and national initiatives are under way to achieve the inter-related aims of improving students' experience of universities and enhancing their success. South African higher education has made strides, in particular, in developing first-year experience models that provide students with clearer communication about what it means to be successful.

The survey findings highlight the importance of these efforts. However, it also identifies those areas where more work is needed.

The findings show that while most students feel that their institutions place emphasis on studying and academic work, they also seem to feel that institutions are not providing enough support either for them to perform well academically or, to a greater extent, for their overall wellbeing. Institutions need to accommodate these perceptions in their designs, at first-year levels and beyond. While there has been progress in providing financial support for more students who need it, for example, a national student feeding scheme would make a significant contribution towards achieving the kind of wrap-around support that is still needed for a large proportion of South African students who struggle to meet basic needs.

For student success to improve, the concept needs to be underpinned by an educational philosophy that reflects the importance of curriculum contextualisation and pedagogical innovation. The ongoing focus on decolonisation, for example, highlights the need for curriculum content that includes a diversity of voices and incorporates high-impact learning experiences that illustrate the relevance of learning for current societal challenges. Likewise, co-curricular environments need to support and promote inclusion, cohesion and student success.

A consistent theme of this report is that the process of talent development – the business of universities – starts with knowing our students. As is evident from the findings discussed, an assessment of higher order skills needs to be expanded and more HIPs need to be introduced to help students acquire the attributes needed to contribute to economic growth.

Developing the talent in our students will obviously also require greater investment in developing the talent of staff – both their teaching and other skills – to provide quality support that optimise student success. South African universities need to find innovative ways to bring staff and students together to create greater mutual understanding, particularly given what we know about the beneficial impact of positive lecturer-student contact and the negative impact on relationships caused by the #FeesMustFall protests.

In order for these efforts to be meaningful, institutions must be able to track progress, determine the impact of these interventions on students' lives, and engage in internal and inter-institutional collaborations to develop data analytics in the sector. The emphasis on moving towards a culture of evidence to advance student success, and integrating engagement data into institutional monitoring and evaluation frameworks, therefore remains crucial.





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