



Siyaphumelela
we succeed

@UCT



DASS
DATA ANALYTICS FOR STUDENT SUCCESS

Siyaphumelela Convening Meeting 2022

Kresge Foundation & SAIDE

Stephen Marquard and Dimakatso Sebothoma

4 October 2022

1. Siyaphumelela@UCT updates
2. Academic Advising updates
3. DASS updates

Siyaphumelela GOALS at UCT

Implement or expand **evidence-based decision-making processes** to support institutional leadership, student support and faculty management to improve throughput rates (time to completion) and the removal of performance disparities among different racial and gender categories at their institution.



Develop and offer at **least one service** (approaches, resources and tools) to improve student success for their own institution and for the wider Siyaphumelela Network.



Lead the Western Cape **regional network** to share insights into and learn how to better support student success regionally.

Service Development

Diagnostic Assessment in
HE: Responding to student
needs using a data-driven
approach: CEA March 2022

Introduction to Design
Thinking Programme:
d-school May 2022

Digital Open Textbooks for
Transformation and
Student Co-Creation:
DOT4D August 2022

Leading the Western Cape Regional Network

Workshop 1 & 2

Defining and Measuring student
success

Workshop 3 & 4

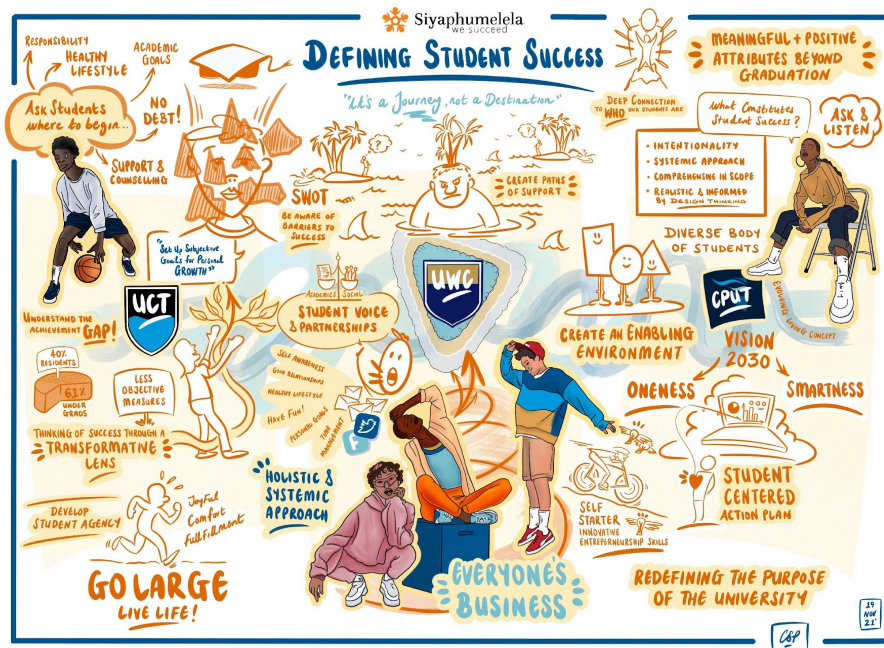
Factors affecting student success
**Supporting Students Along their
Academic Journey to Success**

Facilitated workshop for the regional
network

25 November

Student Success workshop series

- The definition should be appropriate to context as it means different things for different stakeholders.
- University outcomes / success indicators must be disaggregated to understand how various populations are faring against average measures.
- Student success is not a single endpoint but represents a series of successes along the way, and it does not end at graduation
- Lack of understanding of university jargon and confusion with the use of technology.
- Each transition point has a different set of challenges (postgrads generally neglected)
- Students may not recognise that studies are a full time occupation
- Need to improve relationship building between staff and students



Siyaphumelela Conference 2022

10 papers
14 Authors
2 students

Riashna Sithaldeen: **Further towards designing a system for student success**

Stephen Marquard and Kende Kefale: **Know your course and students: Providing actionable insights to course convenors.**

Polite M. Nduru and Riashna Sithaldeen: **Incorporating monitoring and evaluation practices as part of educational interventions planning: From theory to practice.**

Megan Bam and Deepti Charitar, Riashna Sithaldeen: **Exploring the potential of a service-oriented chatbot at the University of Cape Town – initial outcomes and lessons learnt**

Luna August, Decentring the tutor: **Reflections of the online undergraduate theatre tutorial space.**

Precious Mahlalela, Dimakatso Sebothoma and Riashna Sithaldeen: **Student reflections on student participation: What is the value of the student's voice, and is it heard?**

Lauren Oosthuizen (UFS); Danny Fontaine-Rainen (UCT); Subethra Pather (UWC); Ruth Hoskins (UKZN); Sharmla Rama (UKZN); Neo Taimo (Wits); Takalani Muloiwa (Wits); Kudayja Parker (DUT); Mzwandile Khumalo (DUT); Livingstone Makondo (DUT): **Supporting First year students' university transition: A data-driven approach to mapping and responding to the student journey.**

Glenda Cox & Michelle Willmers et al **Panel presentations and discussions: All about OER textbooks**

Emma Whitelaw, Nicola Branson and Murray Leibbrandt : **A shock to the system: Assessing inequalities in university student outcomes during COVID19 closures.**

Nicola Branson and Emma Whitelaw : **The Siyaphambili website: Tracking post-school qualification attainment in South Africa.**

Academic Advising Project updates

CARES: slow down in take up of service, no feedback mechanism in place

CHATBOT: end of seed funding in sight, UCT will need to make a decision if this will become an institutional tool. In the budget process for 2023.

Phambili: fairly successful first half-cycle of the pilot, initially approved by DVC T&L so will need to understand if/how this will move forward. Discussions at various levels.

Student support working group: a cross-institutional grouping aimed at improving integration of student support services towards improved student advising.

Data Analytics for Student Success



DASS is a UCT programme involving CHED, ICTS and IPD. The community of practice created by the weekly project team meetings is one of the most valuable benefits.

Know Your Course and Students (KYCS) reports (launched 30 July 2021)

WIG 2 discovery: existing reports related to student progression

Data Ethics Framework (3 successful workshops in February, workflow in progress)

Maths WG in EBE for MAM1020 investigation (analytics supporting **curriculum, assessment** and **student progression**)

SAAIR Learning Analytics Event Planning for 2023

Presentation at Siyaphumelela Regional Conference on KYCS reports

Institutional visibility, marketing, data literacy (Faculty roadshows, webinars, website)

Ad-hoc analysis and reporting

Know your Course and Students reports

v3 shared with course convenors at the beginning of second semester 2022 with additions:

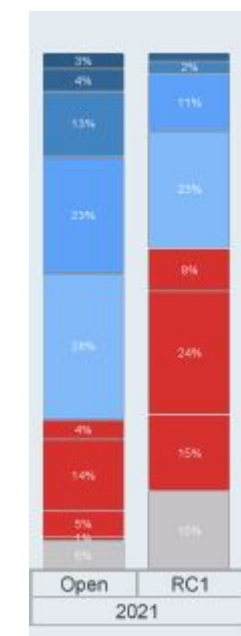
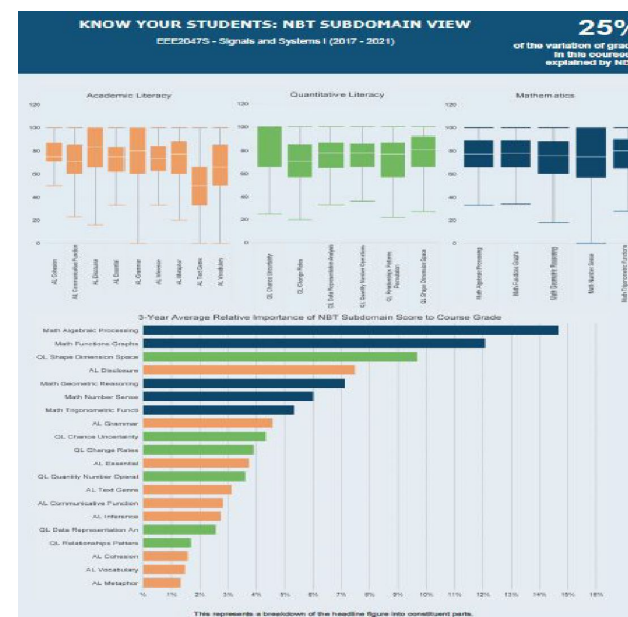
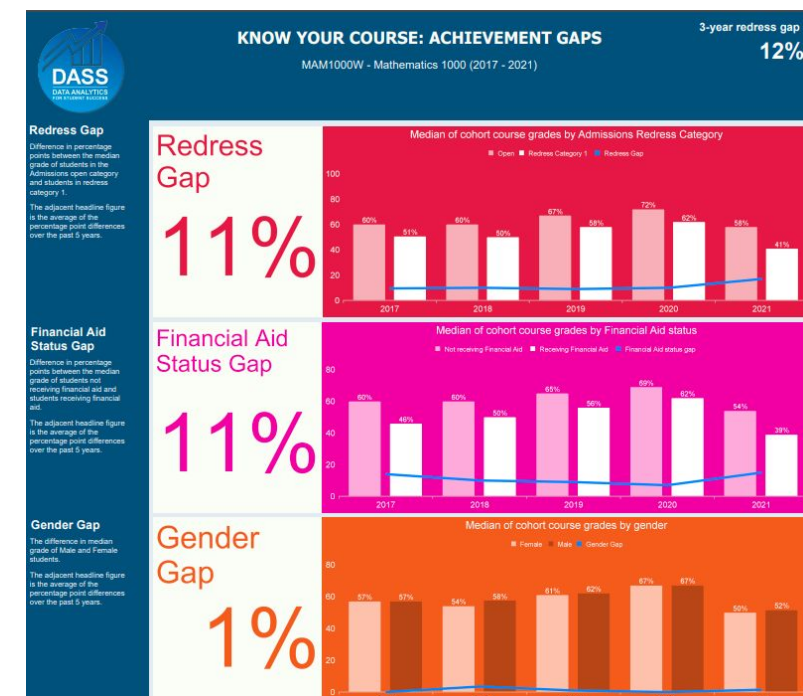
- NBT subdomain analysis (diagnostic assessment)
- Performance in prior UCT courses

NBTs are more significant than we assumed in explaining variation in performance in higher-level courses.

Headline equity indicators are still sinking in.

Coming next (Feb 2023) for KYCS

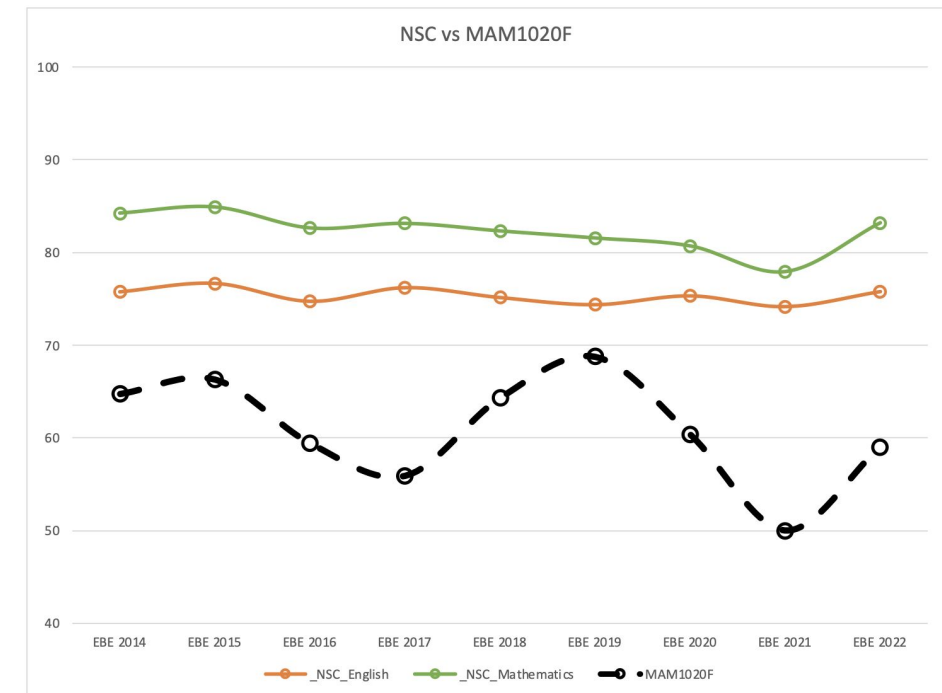
- Postgraduate flavour
- Handling some complexity for equivalent courses
- Other changes emerging from feedback
- Evolution of design and explanations



EBE Maths WG Engagement

Studying the success of students who have taken MAM1020F in subsequent years of study

- DASS working with the Maths WG to define appropriate analytical techniques and statistical approaches.
- This exercise is focused on the *level and difficulty of assessment* for MAM1020F and whether it is serving its purpose appropriately in preparing students for continued EBE studies.
- An exploration of the data will look at the variability of the level of assessment and student performance across a range of years (“easy” exam years or “hard exam” years, and/or are there differences in student preparedness?) and the correlation with student performance in subsequent EBE courses.
- A possible hypothesis to test is: “Students who pass MAM1020F in years where the pass rate is low do better in their following courses than students who pass MAM1020F when the pass rate is high.”



What's next for DASS

Wildly Important Goal 2 is: *“Using academic plans and programmes as the lens, enable all levels of the UCT community to identify where student progression is being impeded.”*

- A **Know Your Programme** report may be a useful facet of this, which in most but not all cases would be aligned with an academic department (chosen major). Programmes like MBChB are an exception.
- DASS is scoping this work at present, starting with engagements with Faculty Managers to understand the programme structure and what reporting is currently in place and used, and where the gaps are.

Transition to Brightspace LMS (2022-2024) introduces new learning analytics and reporting capabilities.



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UCTCARES