

**Achievements in Advising  
and Data Integrations and  
working towards a Student  
Success Framework**



University of Cape Town • iYunivesithi YaseKappa • University



# Three years of Siyaphumelela at UCT

- Service development
- Leading the WC Regional network

(1) 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

(2) removal of performance disparities among different racial and gender categories



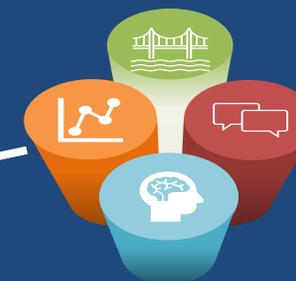
# Shifts needed

- From reactive to proactive
- From ad hoc to systemic
- From anecdote to data supported argument

# Building 4 strong pillars



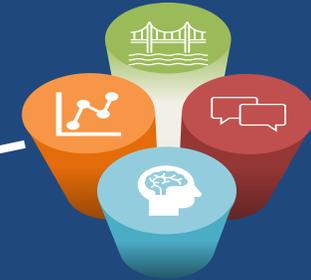
# Towards integrations in academic analytics



Academic Advising  
Academic Development  
Health Sciences  
Educational Assessment  
Engineering  
Innovation in Learning and Teaching  
ICTS  
Institutional Planning

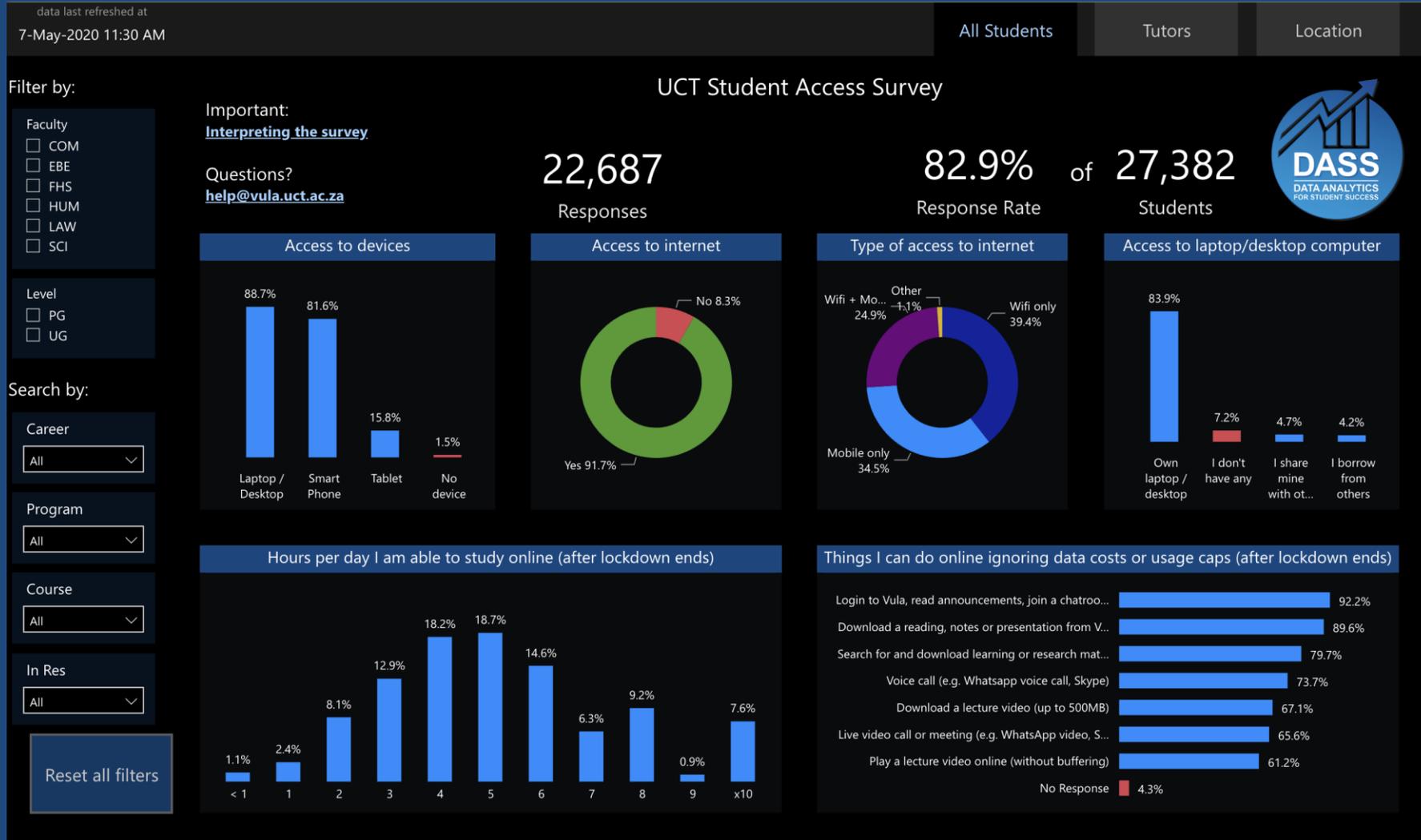


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# Access survey



Actionable data to inform the institutional response: device and data distribution

# Student experience survey



## UCT Emergency Remote Teaching Student Experience Survey

**Faculty**

 COM  
 EBE  
 FHS  
 HUM  
 LAW  
 SCI

**Career**

 (a) UGRD  
 (b) PGDP  
 (c) HONS  
 (d) MAST

**Year of Study**

 1st  
 2nd  
 3rd  
 4th  
 5th  
 6th  
 7th and above

**ADP**

 No  
 Yes

**In Res Term 1**

 No  
 Yes

Home and study circumstances
Start-up/preparation for remote learning
Experience of course load
Experience of online environment
Experience of course content
Experience of interactions
Experience of assessments
Support Services

**3.1. My living circumstances during term 2 were suitable for studying and learning online**

Very Suitable	29.8%
Suitable	29.1%
Not Suitable	9.3%
Very Not Suitable	14.5%
Don't Know	17.3%

3.4

**3.3. On average, I spent the following hours a day studying in a typical week, including weekends**

(a) Less than 1 hour	2.8%
(b) 1 - 3 Hrs	27.7%
(c) 4 - 6 Hrs	38.2%
(d) 7 - 9 Hrs	17.7%
(e) Over 10 Hrs	13.6%

**3.2. I faced the following challenges studying remotely**

Mental health challenges (e.g. anxiety; stress; depression)	71.0%
Family or caring responsibilities	64.3%
Lack of a quiet study space	54.0%
Slow or unreliable Internet connection	51.9%
Financial stresses	35.7%
Physical health challenges (e.g. illness; fatigue)	31.4%
Insufficient mobile data or capped ISP connection	25.5%
Work / job commitments	12.6%
Food security (insufficient access to healthy food)	10.2%
Shared access to a laptop / computer	9.5%
Physical safety and security	7.4%
Other	7.4%

**3.4. I typically studied at these times of day**

(a) Morning	46.1%
(b) Afternoon	53.8%
(c) Evening	48.1%
(d) During the night	59.3%

**3.5. I had sufficient time for remote learning**

Very Sufficient	17.9%
Sufficient	31.2%
Not Sufficient	17.0%
Very Not Sufficient	19.5%
Don't Know	14.5%

3.2

**3.6. I had sufficient data for remote learning**

Very Sufficient	47.4%
Sufficient	22.9%
Not Sufficient	10.6%
Very Not Sufficient	10.4%
Don't Know	8.7%

**3.7. How much daytime data per month do you think is sufficient for all remote learning needs?**

05 GB	1.3%
10 GB	7.1%
15 GB	8.8%
20 GB	24.4%
30 GB	21.6%
40 GB	12.3%
50 GB	12.9%
More than 50 GB	11.8%

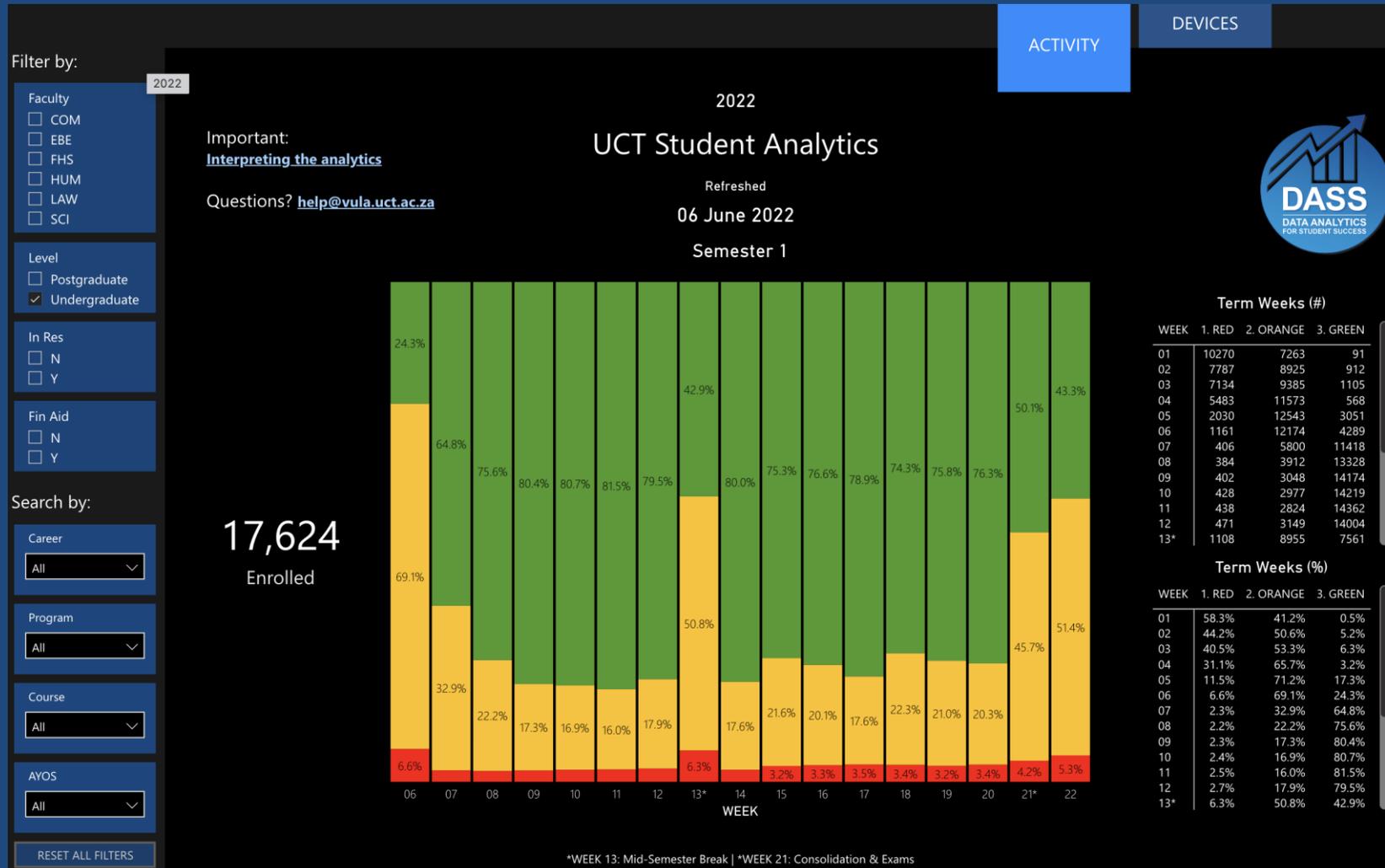
3818

Responses



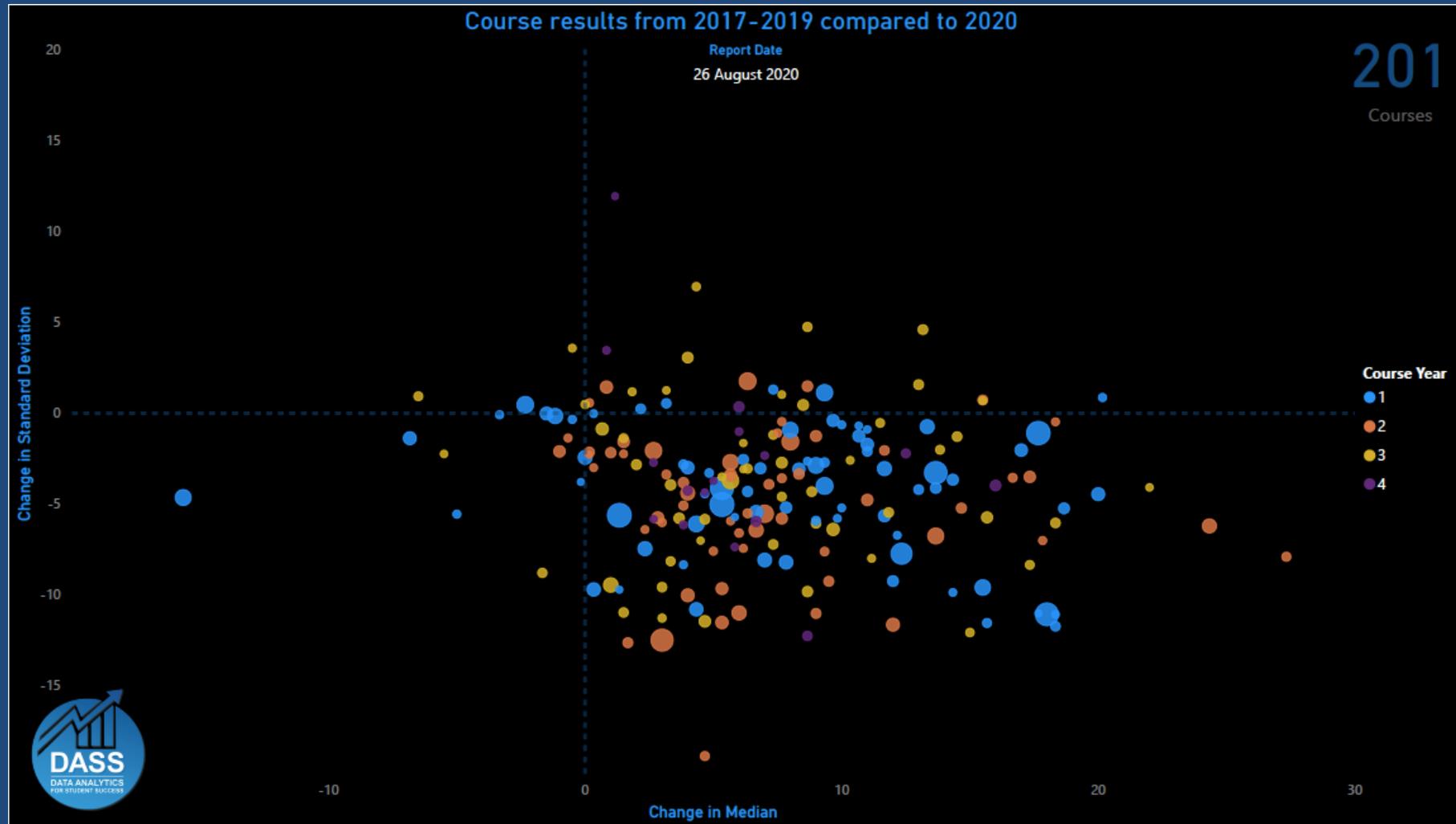
Actionable data to inform the institutional response: return to campus initiative

# LMS activity reports



Actionable data for student engagement behaviour: disaggregated to course level

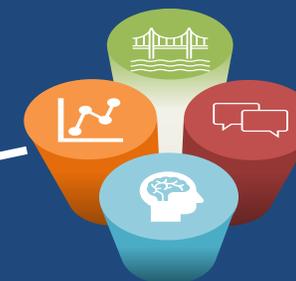
# Exam performance reports



Actionable data to understand performance patterns



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# Data dictionary



- The BI Data Dictionary ([bi.uct.ac.za](https://bi.uct.ac.za))

The screenshot shows the UCT Business Intelligence Data Dictionary interface. The top navigation bar includes the UCT logo, 'UCT Business Intelligence', 'BI Tools', and 'Data Dictionary'. A search bar is located on the right. The main content area is titled 'Universes > Student Records'. On the left, a summary card for 'Student Records' provides key metrics: 1348 fields, 29% metadata completeness, and 491 document references. It also lists owners (Karen Van Heerden) and required access rights (Student Records Viewer and Student Records Writer). A 'Request Access' button is at the bottom. The right side of the interface displays a list of fields with their descriptions and data types. The fields listed are: 'Date Time Last Updated' (String), 'Enrolled / Requested Room Capacity' (String), 'Normal / COVID-19 Size Ranges' (String), 'Date' (Date), 'Date Name' (String), and 'Day Of Week' (Numeric).

UCT Business Intelligence BI Tools Data Dictionary

Universes > Student Records

### Student Records

Description  
Student Records Universe

Owners  
Karen Van Heerden

Required Access rights  
Student Records Viewer  
Student Records Writer

Last Time Updated  
2023-06-06  
04:00:20.534000

<b># Number of fields</b> The total number of fields in this universe, including dimensions, measurements and attributes. <b>1348</b>	<b>{ } Metadata completeness</b> The percentage of fields that have been described. <b>29%</b>	<b>Document references</b> The number of documents that reference this universe in one of its data providers. <b>491</b>
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Note: Last Time Updated on this screen refers to the last time the universe metadata was retrieved from SAP Business Objects.

Request Access

List of the fields available, click on a field for more information.

Filter

- Date Time Last Updated** (String)  
The time and date that the warehouse was last refreshed successfully.  
Admissions Control\folder\Date Time Last Updated\dimension
- Enrolled / Requested Room Capacity** (String)  
None  
Admissions Control\folder\Enrolled / Requested Room Capacity\dimension
- Normal / COVID-19 Size Ranges** (String)  
None  
Admissions Control\folder\Normal / COVID-19 Size Ranges\dimension
- Date** (Date)  
The full Date - format depends of localization settings  
Date\folder\Date\dimension
- Date Name** (String)  
String formatted (YYYY/mm/DD) representation of the date.  
Date\folder\Date Name\dimension
- Day Of Week** (Numeric)  
Numeric value of the day of the week.  
Date\folder\Day Of Week\dimension

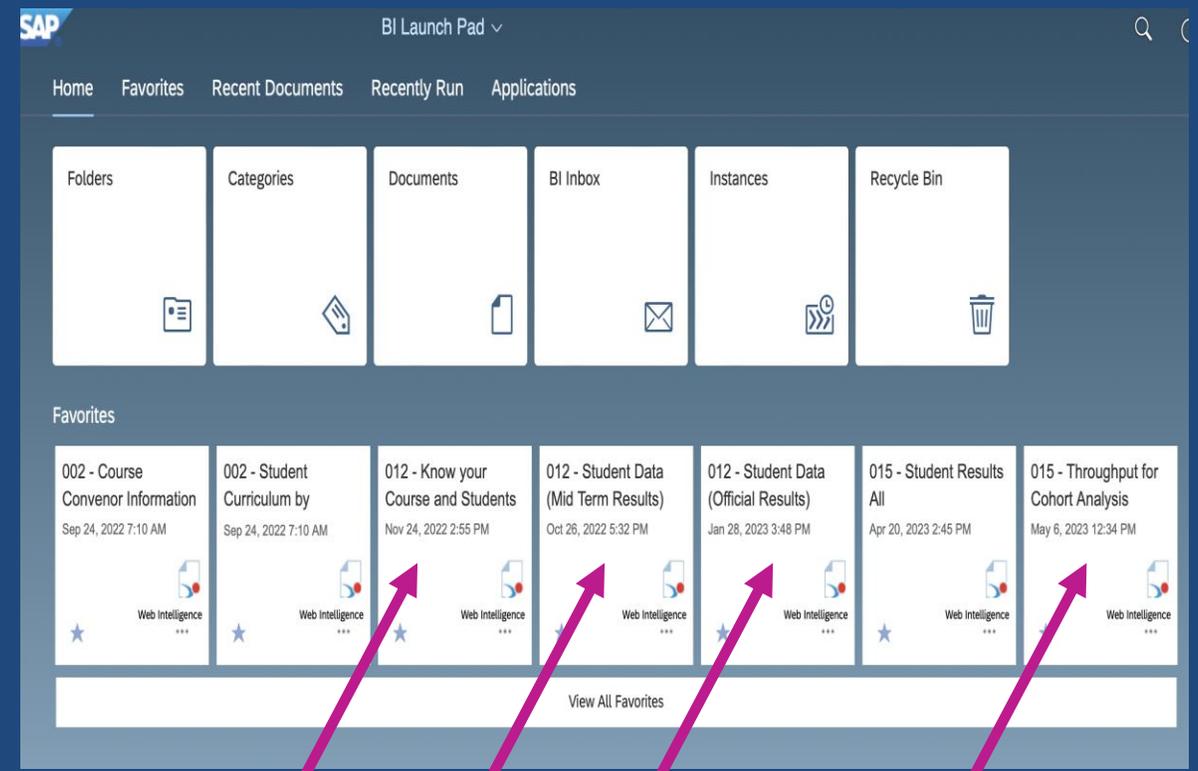


Making academic analytics more accessible



# New BOBJ reports

- Throughput for cohort analysis
- Course performance reports



# Towards integrations in academic analytics

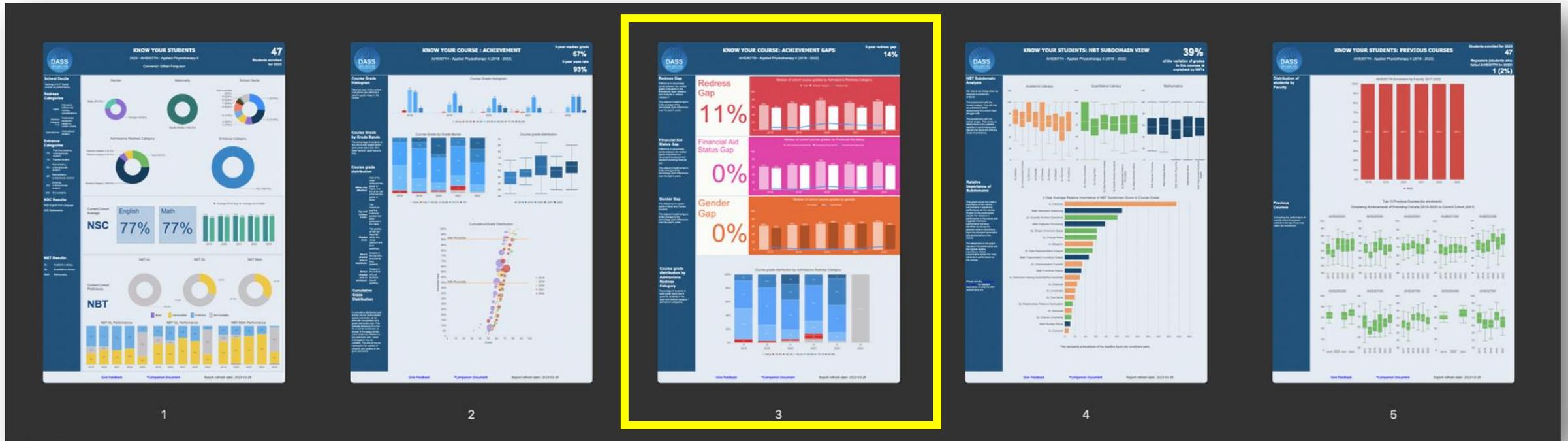


**DASS**  
Data Analytics for Student Success

- Academic Advising
- Academic Development
- Health Sciences
- Educational Assessment
- Engineering
- Innovation in Learning and Teaching
- ICTS
- Institutional Planning



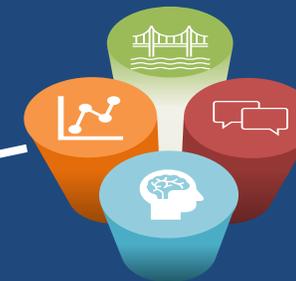
# Course performance reports



## Know your course know your students dashboards

Meaningful data and visualizations about the cohort of students in courses in the department: before, during and after the course delivery, reflecting student prior attainment, student activity and assessment and how course performance compares to prior years, to improve student performance over time.

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# Towards integrations in academic advising

PROFESSIONAL AND CURRICULUM ADVISING

Commerce Case Study

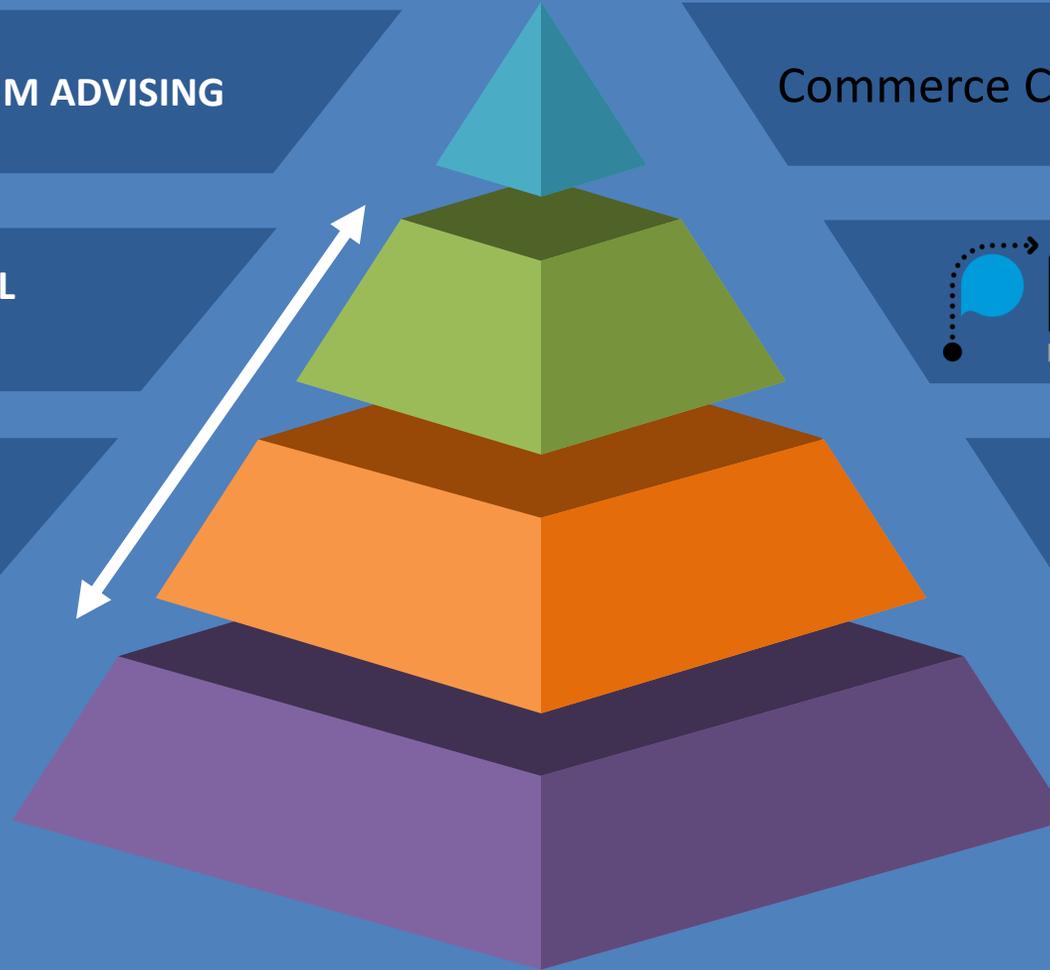
CURRICULATED DEVELOPMENTAL  
ADVISING



CENTRALIZED REFERRAL  
ADVISING



AUTOMATED  
INFORMATIONAL  
ADVISING



# The student voice



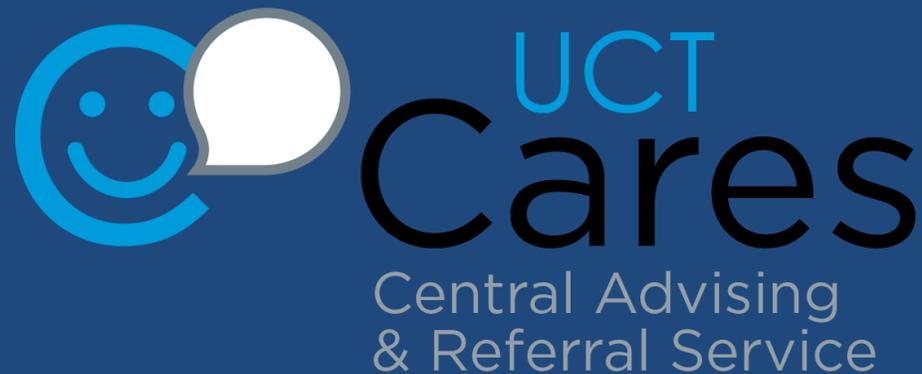
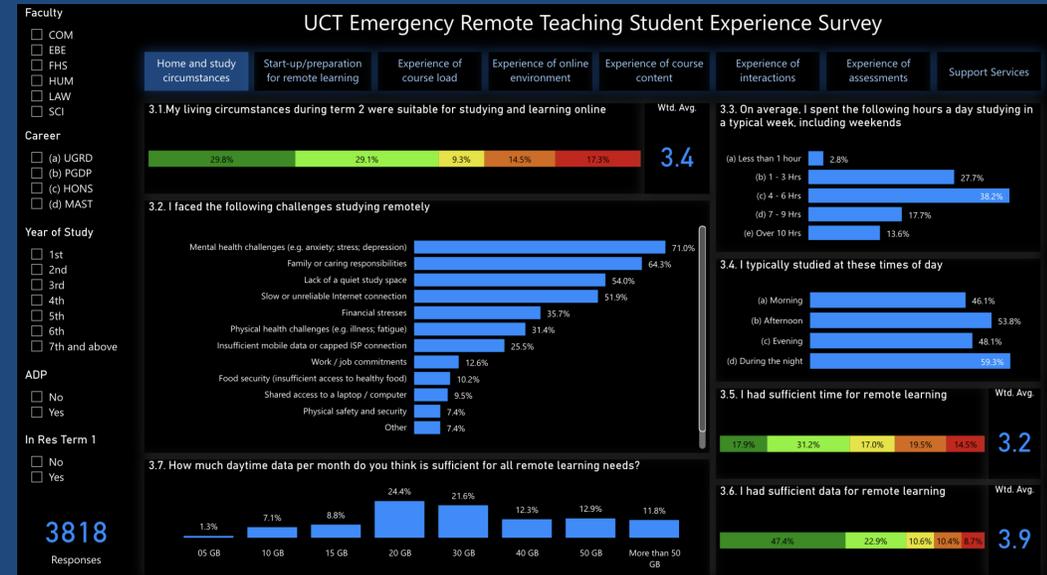
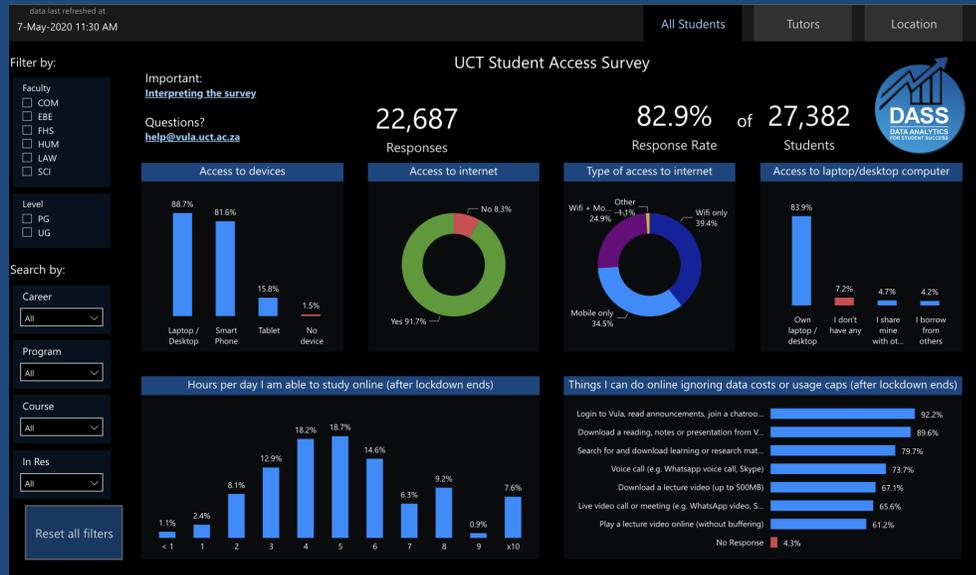




# Enabling student advising and support with data



# Improving institutional responsiveness with actionable data



# Improving institutional operations with real time data aggregation and reporting

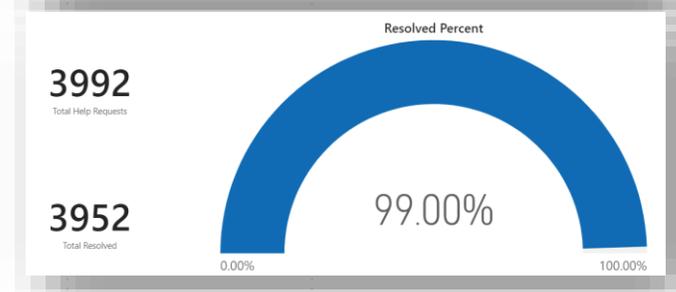
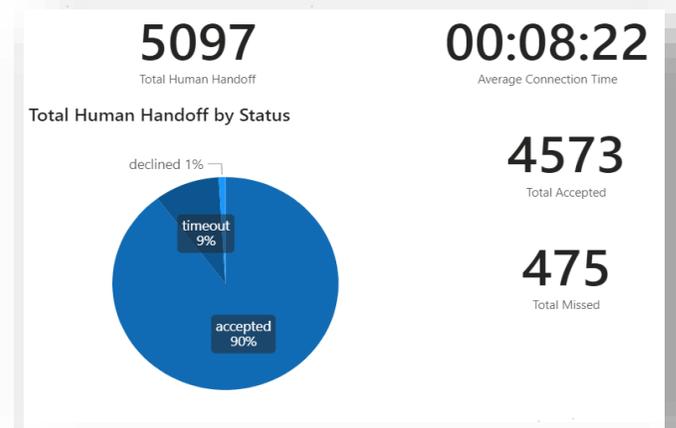
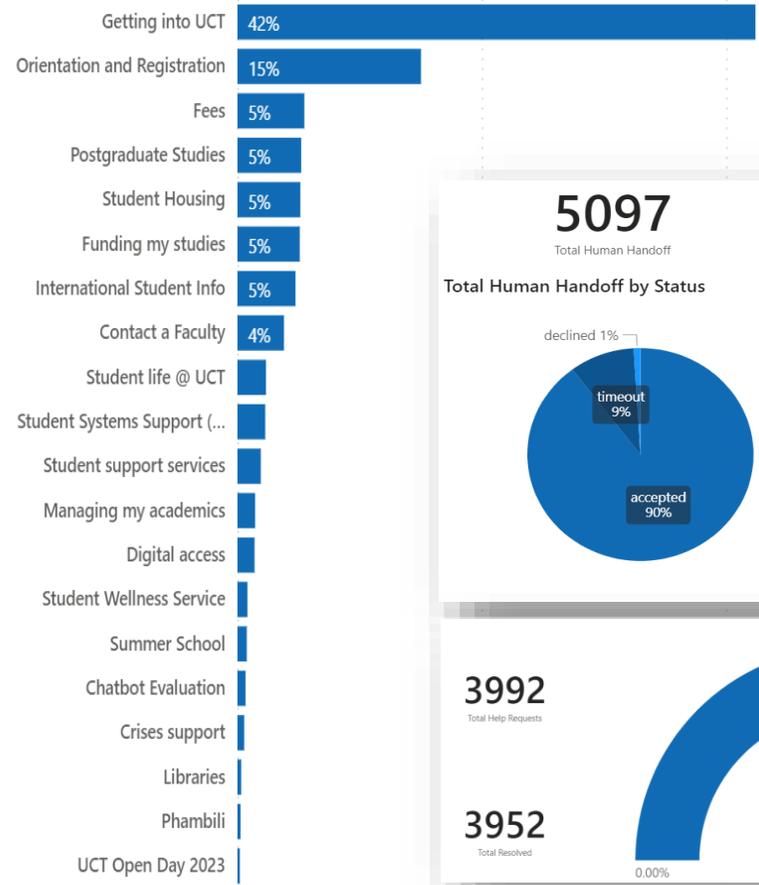


Total no. of unique users  
**~ 23 000**

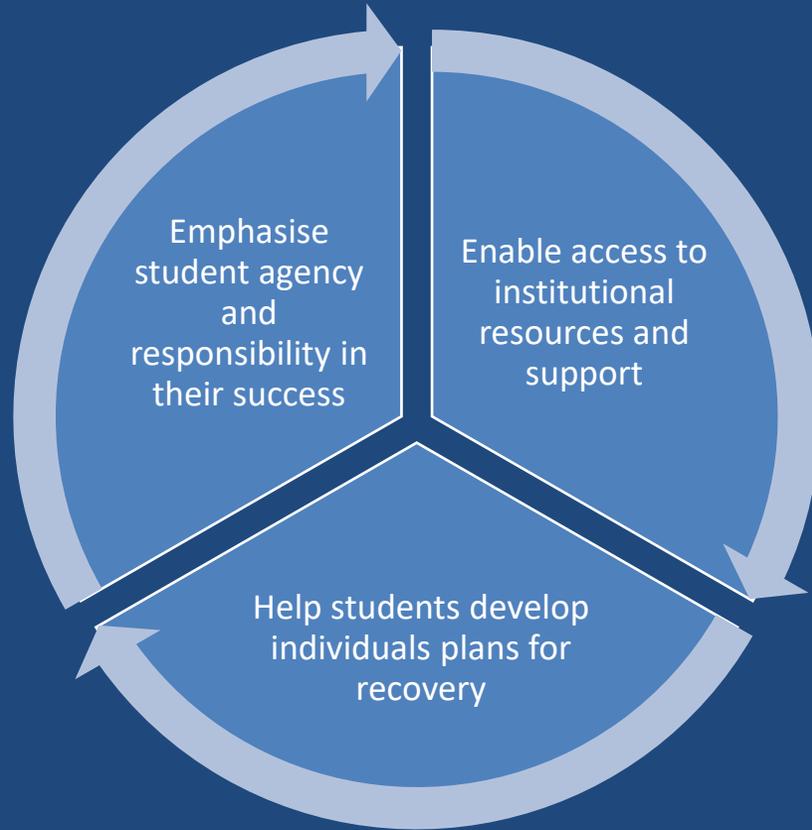
Return Rate  
**31%**

Total no. of messages exchanged  
**~770 000**

Average number of messages per conversation: 34



# Data for developmental advising



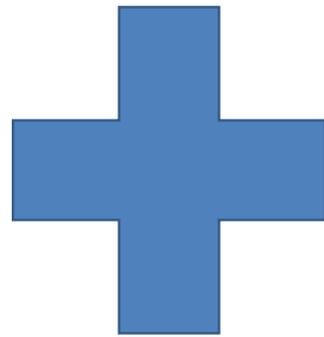
Students who dropped out in good academic standing

Improving Registration

Identifying problematic courses in Commerce

- Next steps:
  - Nudging campaign
  - Content development for students
  - Understanding student movement
  - M&E framework

# Looking ahead...



# A word from the Deputy vice chancellor

