Let's Talk Assessment:

Gathering & Leveraging Data to Support Disability Services

VCU Student Affairs
Student Accessibility and Educational Opportunity

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About the Speaker

Chris Parthemos is the Associate Director of Virginia Commonwealth University's Student Accessibility and Educational Opportunity Office, where he oversees Case Management services, AT Services, and the office's Assessment Cycle.

Chris received his doctorate from VCU's School of Education, where his research focuses include Artificial Intelligence, educational equity, and sense of belonging.

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Session Agenda

- Overview of Assessment (~10 minutes)
- Quantitative Data & KPI (~15 minutes)
- **Activity:** Key Performance Indicators (KPI)
- Qualitative Data & Surveys (~20 minutes)
- **Activity:** Survey Instrument
- Analysis & Dissemination (~10 minutes)
- **Q & A** (Any time remaining)

Laying Out some Key Terms

ASSESSMENT BASICS

What?

Assessment is the collection and Analysis of Data to inform practice

Some Key Terms

Data	Collected individual records (**datum**) of information from a single point of observation. Can be quantitative (numerical) or qualitative (text).
KPI	**K**ey **P**erformance **I**ndicator – data that describes or measures one or more of the core functions of your office.
Baseline	Your data record up to the present – this tells you how things *have been*, and is what allows you to assess what works and what does not

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When?

Assessment should be done on an ongoing basis, as individual assessments can be subject to unintended biases

Let's Compare Storytelling

Single Assessment

Our students reported their satisfaction with DRO's service, on average, at a value of 3.5 out of a possible 4.

Assessment Over Time

In this year's survey, students reported an average satisfaction of 3.5/4 – this represents a significant increase from last year's evaluation, which was 2.8, and the prior year's which was 2.9.

Why?

Assessment can be a useful tool in guiding the development of programming, and supporting funding and staffing requests

AHEAD Professional Competencies

Competency 5.2

Gathering and analyzing data to effectively perform ongoing assessment of campus accessibility

Competency 5.3

Gathering data relevant to the operation of the disability unit to effectively support ongoing assessment according to AHEAD and/or other relevant program standards

But really… Why?

To tell a story about our work to the people who need to hear it

The basic facts of your narrative

QUANTITATIVE DATA & KPI

Basic Definition

Quantitative data is information that can be counted or measured, and is expressed as a number.

Examples:

Demographic Information, # of 'Uses' of a service, GPA

What can we do with this data?

Quantitative data is amenable to analyses that strive for objectivity, such as:

- Statistical Analysis
- Descriptive Statistics
- Charting/Graphing
- Benchmarking

Advantages

Quantitative data is often what people *think* of when they think of assessment. It can be:

- Easy to understand
- Easy to acquire
- "Objective"
- Persuasive

Disadvantages

Quantitative data can be incomplete on its own, as it generally presents a snapshot of something. It can be:

- Less meaningful
- Harder to interpret
- Biased or Misused
- A path to a ‘false +/-’

Some examples[1]:

Academic Year ▲	2017	2018	2019	2020	2021	2022	2023	2024
Total Housing Requests	93	141	136	163	216	335	353	400
Housing Approvals	61	72	72	81	126	177	204	275
Housing Denials	32	69	64	82	90	158	149	114
Dining Approvals					27	29	30	8
Dining Denials					1	0	2	0

Sometimes, the numbers speak for themselves

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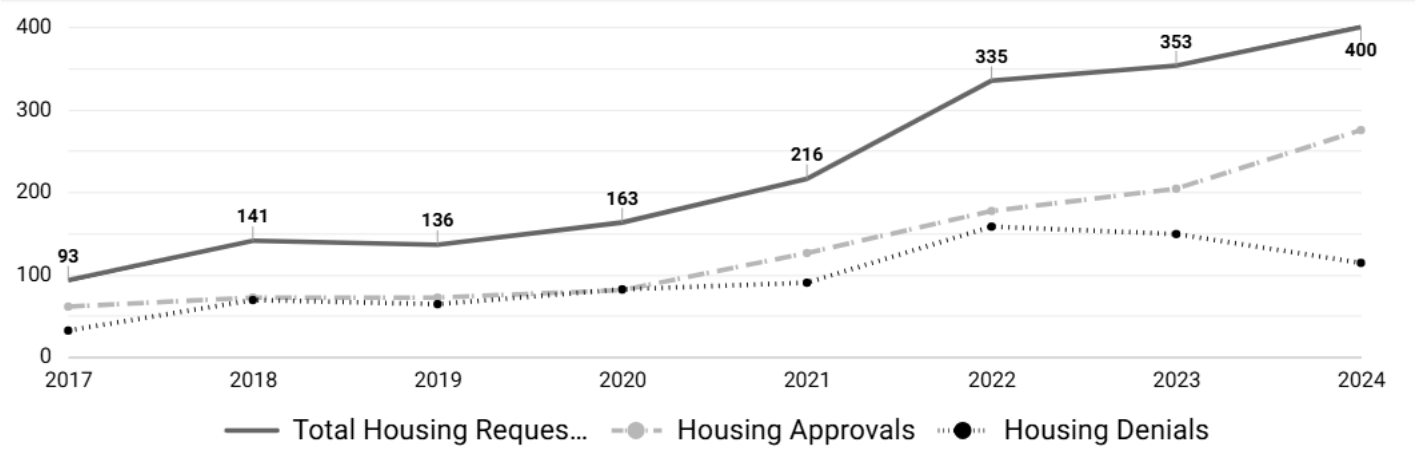
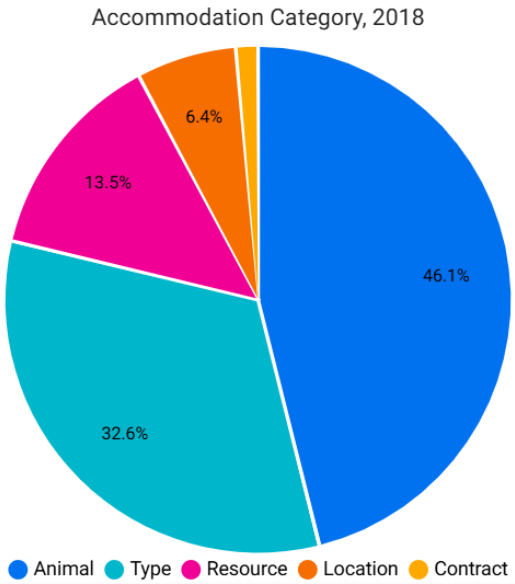
Some examples[2]:



Others, a graph or chart can make things clearer

Some examples[3]:



And some stories are best told in a graphic format

Kinds of Quantitative Data

KPI	Expression of your office's core services – how *many* you serve, how *much* output you produce.
Demographics	What are the characteristics of your stakeholders? How many fall into each category? Does this match your 'expected' demographic?
Evaluation	How do people rate and assess your services? How 'successful' are you, as assessed by the folks you serve?

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Demographic Data

When considering demographics, consider the dynamics of your institution. What are the relevant aspects of your population?

You might consider:

- Race/Ethnicity
- Gender Expression
- Graduate/UG
- Primary Major
- Primary Disability
- Age
- First Generation Status
- International Students

Performance Data

Keep in mind that your student's performance may have bearing on the success of your work, and can be persuasive to stakeholders:

You might consider:

- Term GPA
- Cumulative GPA
- Retention Rates
- Time-to-Degree
- Credits-per-Semester
- Completion %

ACTIVITY:
Key Performance Indicators

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Access the Following Link, or Raise a Hand:

- KPI Related to Accommodations
- KPI Related to Testing Services
- KPI Related to Disability Services (broadly)

Presenting your stakeholders' interests

QUALITATIVE DATA & SURVEYS

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Principles for Survey Design

1. Wording is Key: Avoid options which will frame a given response as *better* or correct
2. Length is the enemy – your participants *will* get fatigued as the survey progresses
3. Consider what you *need* to get through a survey, and what you could get from other sources

Important!

Not all survey data is inherently qualitative. In fact, most survey data *is not*.

Basic Definition

Qualitative data is the (non-numerical – generally verbal) expression of a person's opinions, knowledge, etc.

Examples:

Interviews, Focus Groups, Open-Ended Survey Questions

Kinds of Survey Questions

- Multiple Choice
- Fixed Response
- Likert Scale
- Demographic
- Ranking

- Open-Ended
- Dichotomous
- Matrix
- Rating Scale
- Short Answer

- Closed Response
- Multiple Selection
- Single Selection
- Personal Information
- Image/Media

…And the list goes on!

Major Categories of Questions

Multiple Choice	The survey participant receives a fixed set of answers, and chooses one or more of the options. These are not a ranking, or rating, just a response.
Likert Scale	Participants are asked to rate their agreement/disagreement with statements on a scale, which the survey will convert to quantitative data
Open Response	Participants are given a prompt, and space to respond as they see fit. Can be of varying length.

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Principles for Multiple Choice

1. Wording is Key: Avoid options which will frame a given response as *better* or correct
2. Consider carefully whether to provide single or multiple selection options
3. Avoid offering too many choices (unless the situation requires it (e.g.: demographic questions)

Principles for Likert-Scale

1. Wording is Key: Avoid options which will frame a given response as *better* or correct
2. Consistency is also key – when assessing multiple similar things, apply similar framing to each Q
3. Consider whether your question needs or benefits from neutral or N/A options

Principles for Open Ended

1. Wording is Key: Avoid options which will prompt a specific answer (e.g.: avoid Yes/No questions)
2. These require time and thought to respond, so:
   a) Only use them when necessary
   b) Provide a smaller number of these on your survey

Keep In Mind!

Ideally, your survey will take 10-15 minutes or less to complete.

ACTIVITY:
Survey Development

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Access the Following Link, or Raise a Hand:

- Qs related to Stakeholder Knowledge
- Qs related to Stakeholder Satisfaction
- Qs related to institutional culture

Writing and Publishing your story

ANALYSIS & DISSEMINATION

Analyzing Quantitative Data

There are many ways of analyzing quantitative data to consider:

1. Let the numbers speak for themselves (e.g.: make a table, report a figure directly)
2. Provide opportunities for visual analysis (e.g.: graphs, charts)
3. Perform simple descriptive statistics (e.g.: averages, comparisons)
4. Perform complex inferential statistical analyses (e.g.: ANOVA, Chi-Squared Test)

Descriptive vs. Inferential

Descriptive

Used to summarize large groups of data, or make simple comparisons

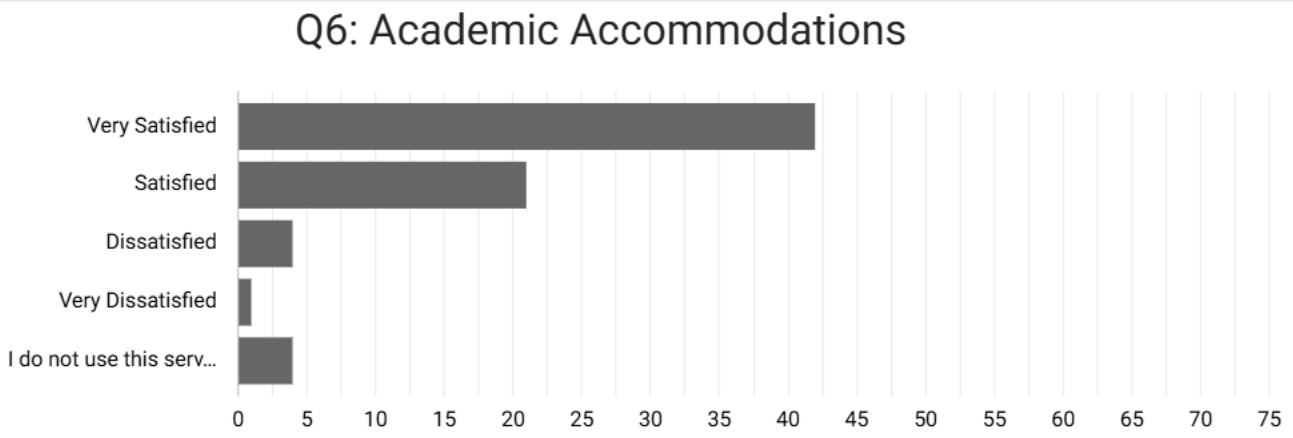
(e.g.: On average, DSO students have a 3.4 GPA, in contrast to a whole-university average of 3.3)

Inferential

Used to make complex analyses to identify correlations within your data

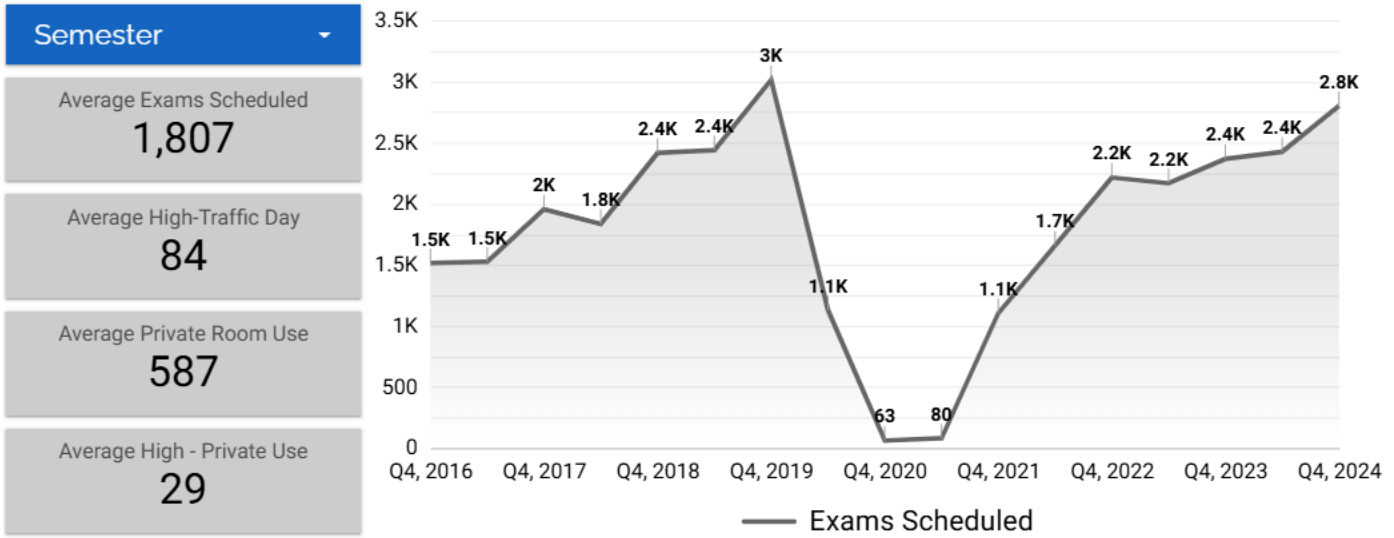
(e.g.: Chi-Squared test to determine if the demographic breakdown of DSO students 'matches' the university)

Visual Analysis - Surveys



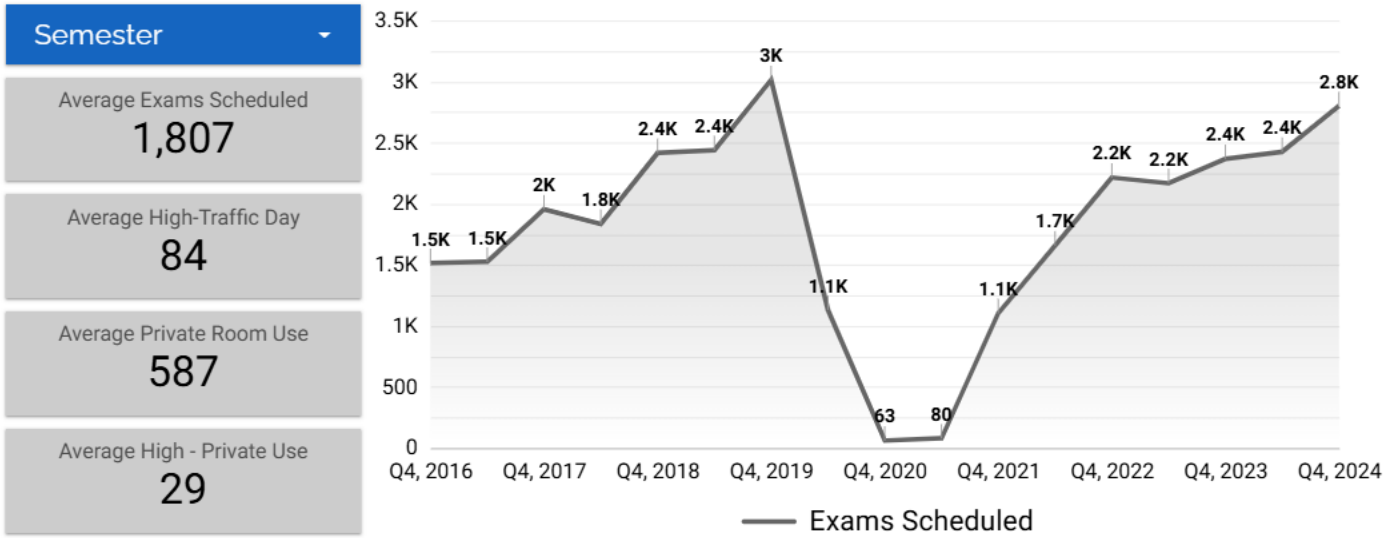
Sometimes, a visual display of responses allows the reader to better identify patterns than an "average response" might

Visual Analysis - KPI



Again, sometimes visualizing trends can allow a reader to better understand them – making connections between time and trend

Visual Analysis - KPI



Again, sometimes visualizing trends can allow a reader to better understand them – making connections between time and trend

Questions for your Numbers

In your quantitative analysis, consider:

1. What is this like *right now?*
2. How does that differ from
    a) How it has been in the past?
    b) How it is for students not registered with DSOs?
3. What might explain this change?
4. Is this change what we need/want to see?

Analyzing Qualitative Data

Qualitative data often (literally) speaks for itself – it is a great idea to select a couple of standout quotes for each question, and include them with your reporting.

You can take this analysis further by *coding* your data for themes.

Qualitative Coding

Qualitative coding involves assembling a list of organized, categorized "themes" present in a bank of qualitative data, and individually assigning (coding) these themes to each quote

General principles:

Avoid 'over-coding' each quote (a good rule of thumb is 3, max), and simplify your codebook as much as possible!

Coding Example

*"**DSO** is great – the accommodations are helpful, and the staff always treat me with respect. The issue is faculty that do not honor the letters we share with them or even respond to them."*

Potential Coded Themes:

Positive Feedback (DSO), Positive Feedback (CM), Negative Feedback (Faculty), Faculty Response Time

Questions for your Quotes

In your quantitative analysis, consider:

- What is this person saying?
- What can I learn from this?
- What might explain their feelings about this subject?
- What might this say about the quantitative data I have?

How Do I Share It?

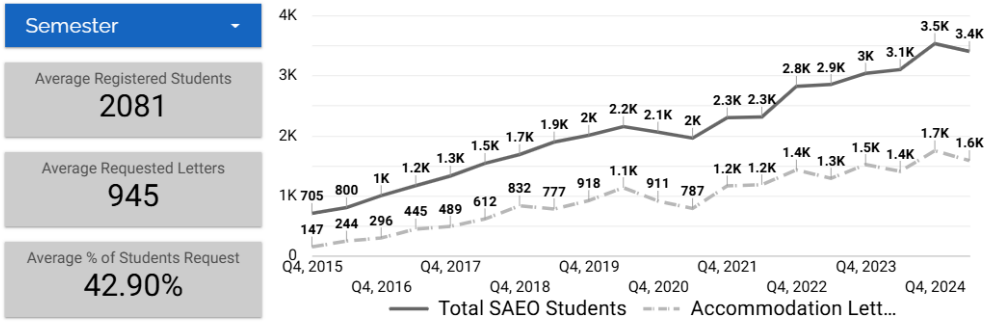
There are a lot of ways you can share your data with key stakeholders, including:

- Create a simple presentation with key figures, charts, and quotes, and supplement with your own overview and narrative
- Provide a thorough report, analyzing these figures
- Construct a live dashboard, hosting your data over time for key stakeholders to navigate

Bringing it All Together

SAEO's Enrollment and Usage

*SAEO's trends over the last 10 years show a consistent, steady increase in usage among students on the Monroe Park Campus - this is reflected in both the number of students registered (which, as of SAEO's most recent assessment, makes up **14.4%** of the MPC population) and the number of students sharing at least one accommodation letter with faculty during the active semester.*



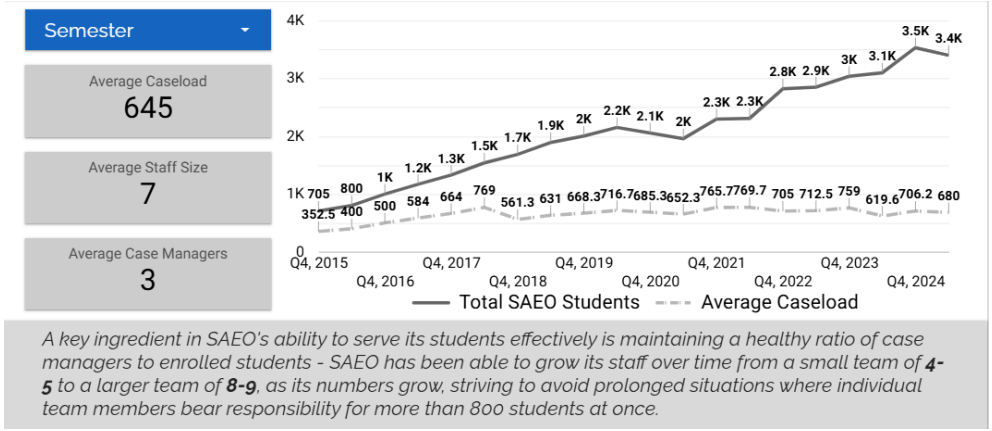
"I am only still at VCU because of the AMAZING staff at SAEO!"
- Annual Student Survey, Spring 2023

Blending our methods lets us:

- Contextualize our numbers
- Add weight to our quotes

All told, we have a convincing, comprehensive narrative.

To Tell a Story



*A key ingredient in SAEO's ability to serve its students effectively is maintaining a healthy ratio of case managers to enrolled students - SAEO has been able to grow its staff over time from a small team of **4-5** to a larger team of **8-9**, as its numbers grow, striving to avoid prolonged situations where individual team members bear responsibility for more than 800 students at once.*

Having longitudinal data lets us:

- Make a convincing argument
- Identify trends in advance

This is generally the best route to making a strong case for funding

Key Takeaways

Make use of as many sources of information as you can. Cast a wide net, and prioritize data you can follow over time.

Prioritize simplicity and interactivity in your analyses – let your readers come to their own conclusion.

Honor the contributions of the folks you get your data *from*

Q + A TIME!

Additional Resources

Google's Looker Studio: Free, comprehensive interactive data reporting tool

Program Evaluation, Theory and Practice (3e): ISBN 9781462555901. Mertens, Hall, & Wilson. Guilford Press, 2025.

Creswell, J. W., & Plano Clark, V. L. (2018). Designing and Conducting Mixed Methods Research (3rd ed.). Thousand Oaks, CA: SAGE.

Forthcoming: Publication from Chris Parthemos in Journal of PostSecondary Education and Disability (Likely 2026)


THANK YOU