MODULE TWO:

DATA VISUALIZATION

Use data visualizations to communicate findings and support decision-making

DATA LITERACY SERIES

From Evidence To Action

Reynolds COMMUNITY COLLEGE

UNLOCKING POTENTIAL

Module 1: You are a Data Person

Module 2: Data Visualization

Module 3: Advancing the Use of Qualitative Data

Module 4: Sensemaking - Moving from Data to Insight

Module 5: Translating Insight into Action

This five-part professional development series is designed to strengthen data literacy skills and foster a data-informed culture at Reynolds. Using real student success data, participants will learn how to interpret, visualize, and apply data to support decision-making across campus. Faculty and staff will work together to explore Reynolds' data, transform insights into understanding, and move from evidence to action.

A QUICK NOTE ABOUT US

Reynolds Data Team

The Reynolds Community College Data Team is a cross-department committee that facilitates data-driven decision making at the college.

Membership

Members include faculty and staff from Institutional Research, Institutional Effectiveness, Student Affairs, Professional Development, academic schools, grants management and strategic planning.

What We Do

The data team collects, describes, and analyzes data to provide insights that inform decision making in areas connected to the college's student success goals, including Reynolds' strategic direction, Impact 2027.

SESSION OVERVIEW

Hands-On Dashboard Skills

Participants will learn to interact with dashboards, apply filters, and explore visual data for decision-making.

Data Visualization Interpretation

The session covers interpreting bar charts, trend lines, and maps to communicate data insights effectively.

Enrollment Data Analysis

Demonstration on using enrollment dashboards to track and analyze student data trends.

Focus on Gateway Math Metrics

Special attention is given to gateway math metrics in the College-wide Student Performance dashboard.

WHY DATA LITERACY MATTERS

Forms of Data

Data literacy includes understanding quantitative, qualitative, and contextual data in everyday and professional use.

Curiosity and Inquiry

Being data literate means asking good questions and building hypotheses, not just statistical analysis.

Shared Responsibility

Data literacy is essential for all faculty and staff to engage meaningfully and support evidence-based decisions.

ACCESSING REYNOLDS DASHBOARDS

Login Methods

Users can access dashboards through personal accounts or the college intranet for convenient data entry points.

SAS Account Link: https://jsrprodviya.ondemand.sas.com/SASLogon/login

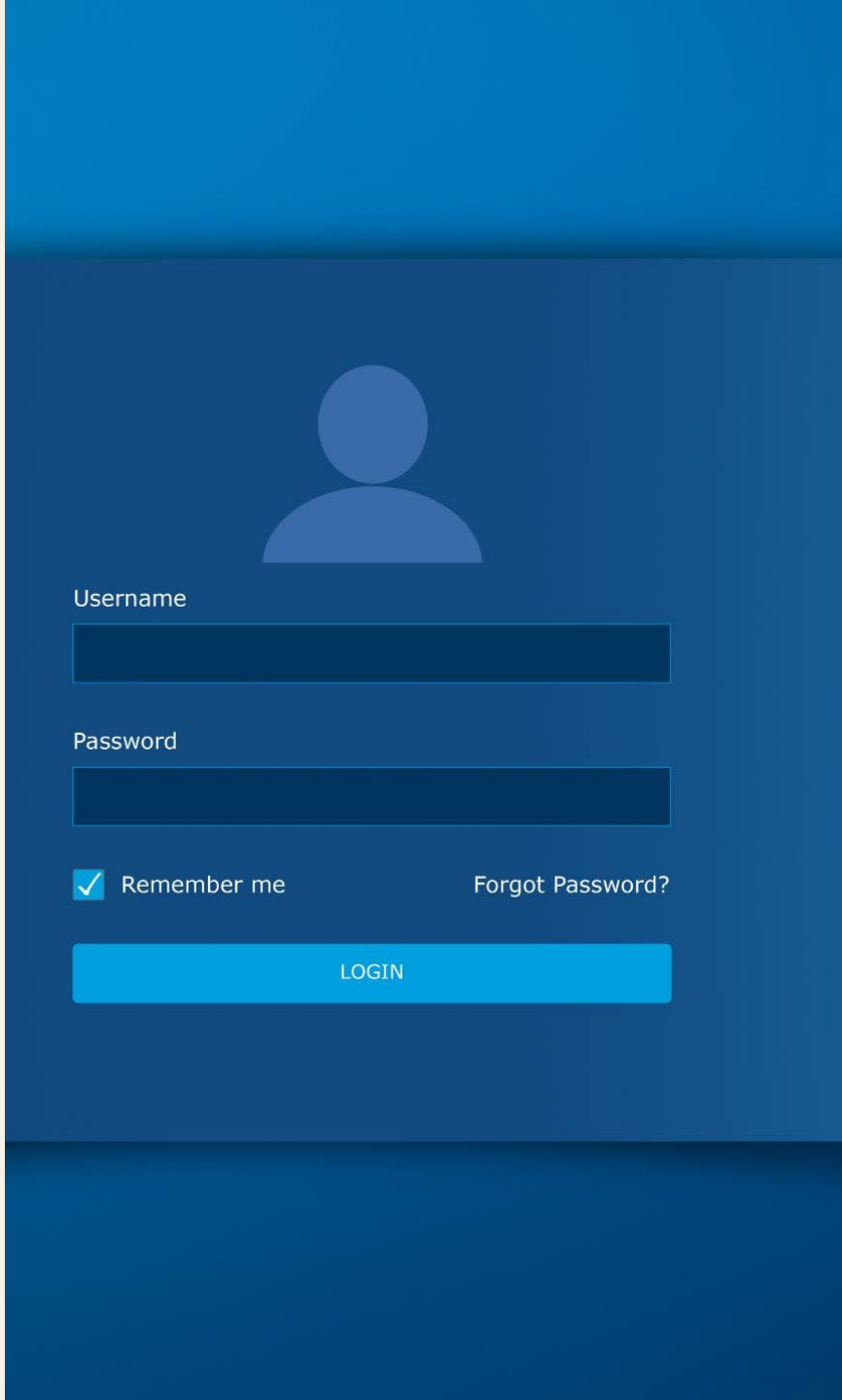
Intranet Link: https://intranet.reynolds.edu/enrollment-reports/index.html

Navigation Instructions

Step-by-step guidance will help users navigate the dashboard interface efficiently to find relevant data.

Data Engagement

Mastering dashboard access empowers faculty and staff to participate confidently in data-driven discussions.



DASHBOARD FEATURES & INTERACTIVITY

Applying Filters

Users can refine data views by applying filters for term, course, or demographic group to focus on relevant information.

Using Tooltips

Tooltips provide additional data insights without cluttering the dashboard, enhancing understanding at a glance.

Maximizing Chart Views

Maximizing chart views allows users to analyze data more deeply and present insights clearly during presentations.

INTERPRETING VISUALIZATIONS

Bar Charts Analysis

Bar charts display information by a grouping, helping users compare performance across groups effectively.

Trend Lines Interpretation

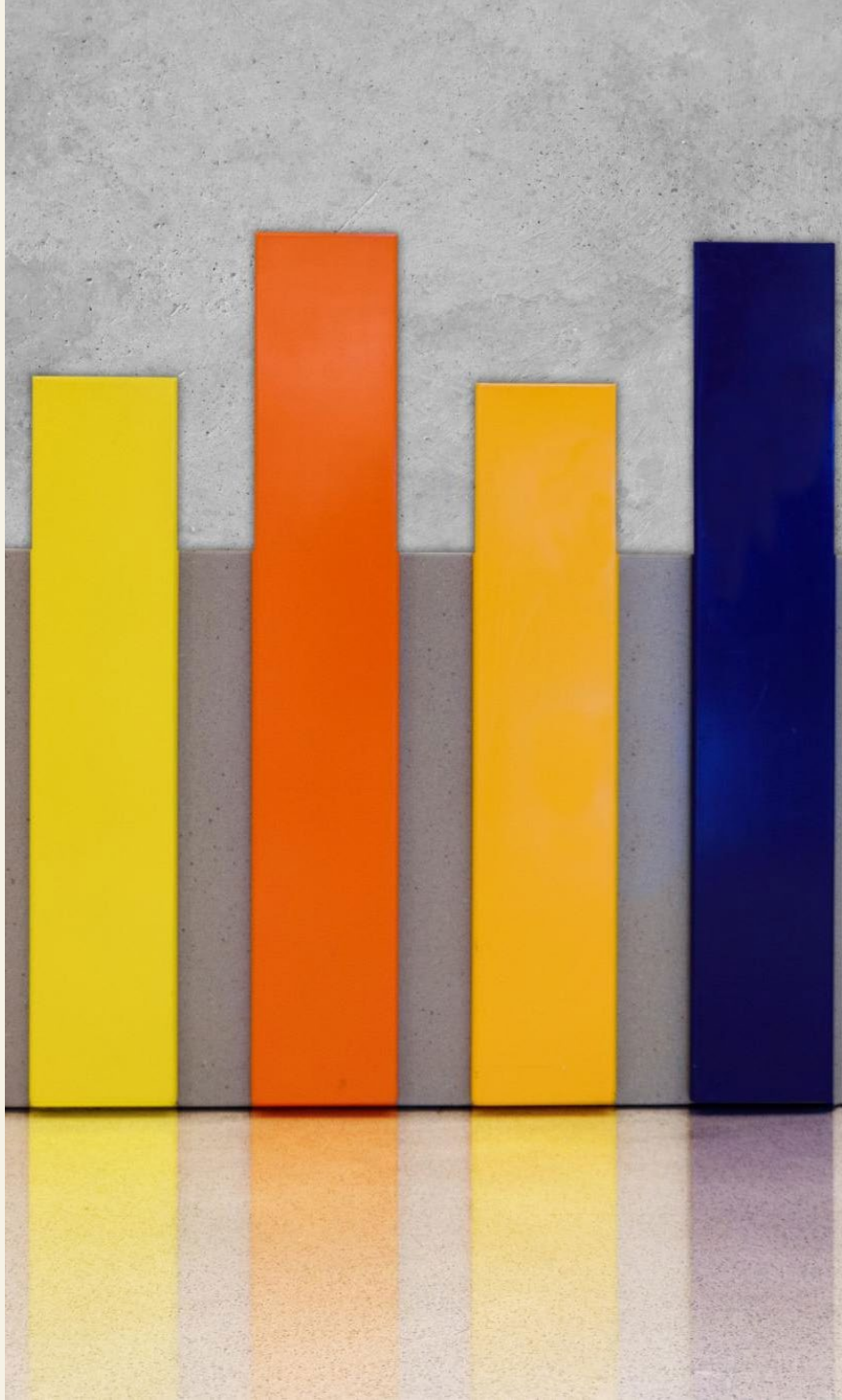
Trend lines illustrate performance changes over time to reveal progress or decline patterns.

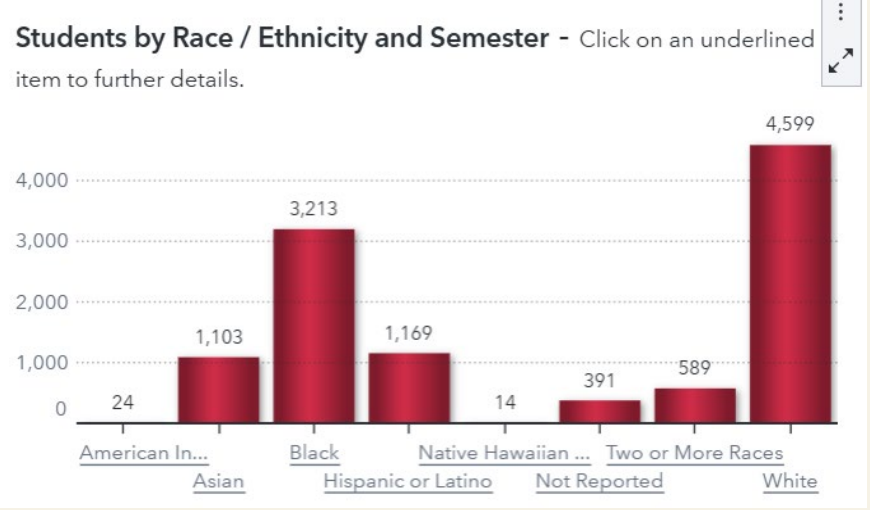
Geographic Enrollment Maps

Maps highlight geographic patterns, offering insights into regional participation differences.

Charts

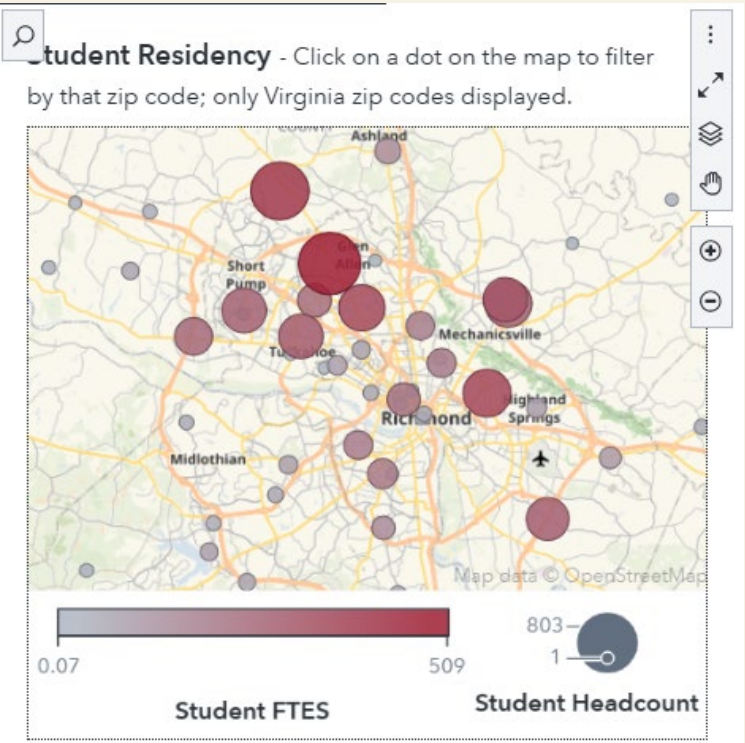
Charts are traditional "rows and columns" of data, displaying a large amount of detailed information in a summarized format





BAR CHARTS

LINE CHART



GEOGRAPHIC MAPS

Fall to Fall Retention Rate by Race and Gender - Click on a caret to s gender. Click on a column header to sort on that item.

Race or Ethnicity	Fall to Fall Retention Rate	Total Students Retained	Total Students
Total	**49.3%**	**24,841**	**50,427**
American Indian or Alaska Native	46.9%	91	194
Asian	60.4%	2,170	3,591
Black	42.7%	7,093	16,596
Hispanic or Latino	50.9%	2,309	4,539
Native Hawaiian or Other Pacific Islander	52.1%	50	96
Not Reported	54.2%	485	895
Two or More Races	48.5%	1,102	2,274
White	51.9%	11,541	22,242

'TRADITIONAL' CHART

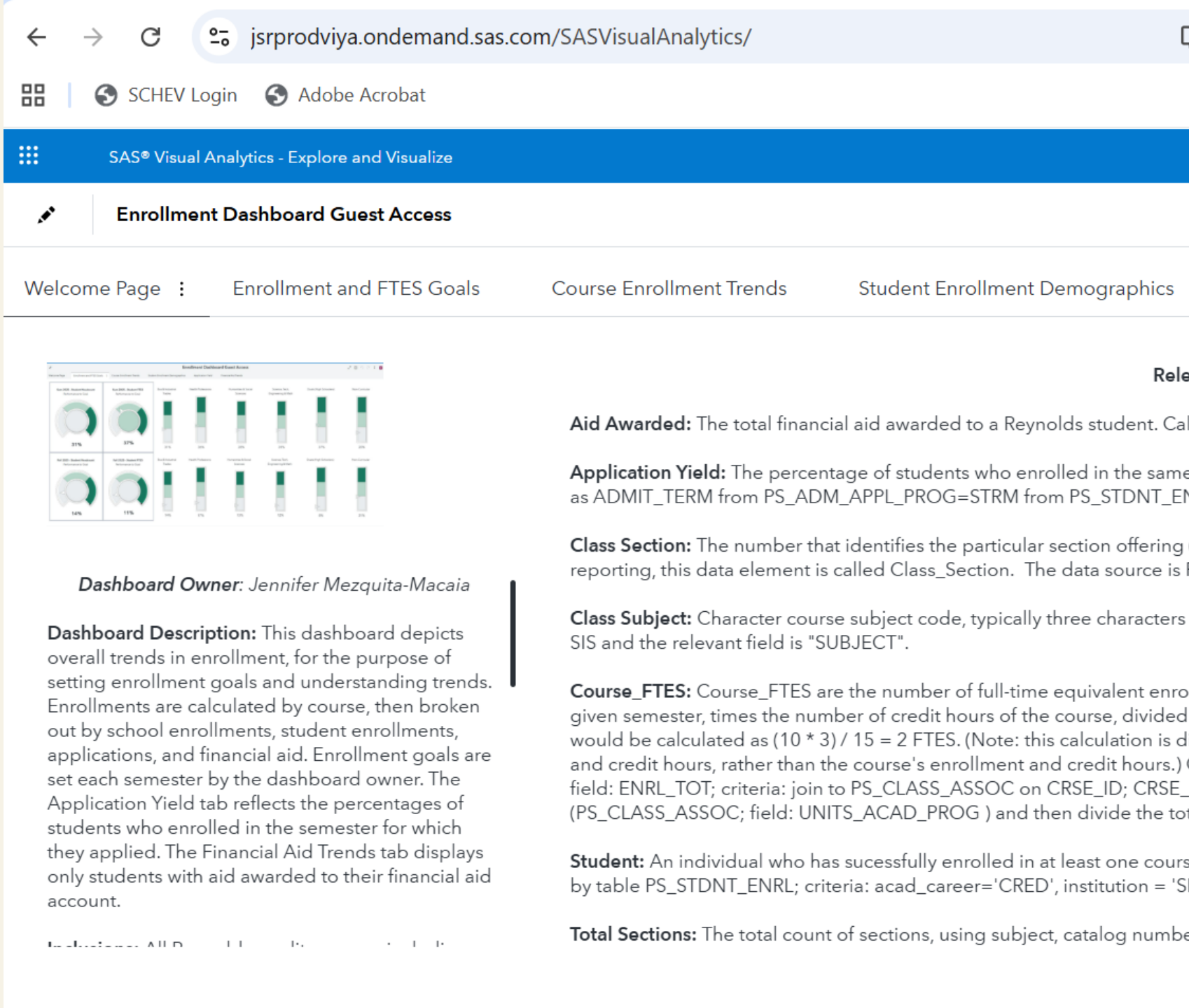
LET'S PRACTICE

Go to this link: https://intranet.reynolds.edu/enrollment-reports/index.html

- Click on Enrollment Dashboard
- Click on "click here to view the Enrollment Dashboard" link

Then...

- Apply and remove filters
- Use tooltips
- Use an interactive feature



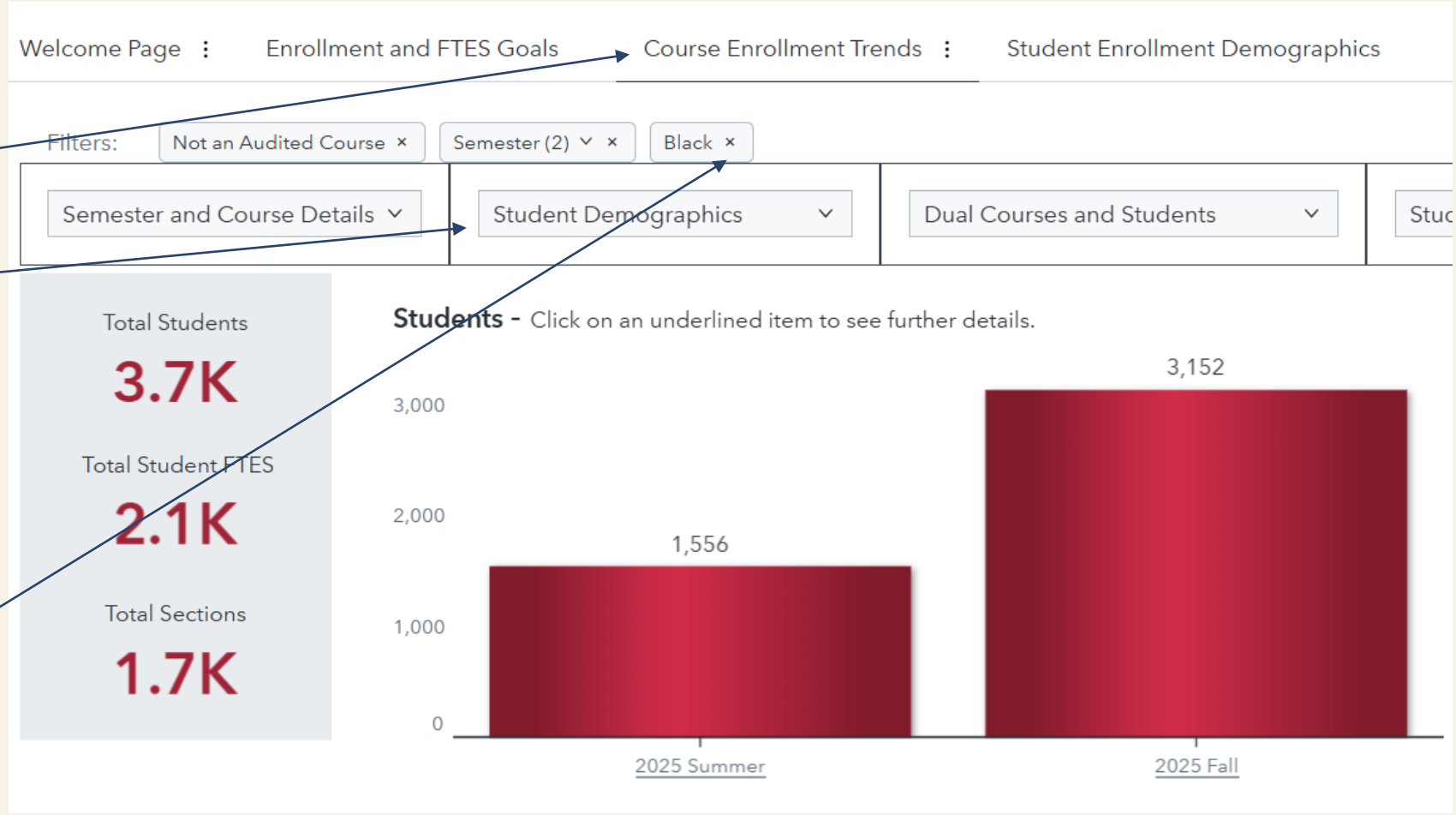
APPLYING AND REMOVING FILTERS

Applying filters

- Click on the tab named "Course Enrollment Trends"
- Click on the filter menu called "Student Demographics"
- Click on "Black" in the Race / Ethnicity filter menu

Removing filters

- Click on the small "x" on the right-hand side of the breadcrumb descriptor



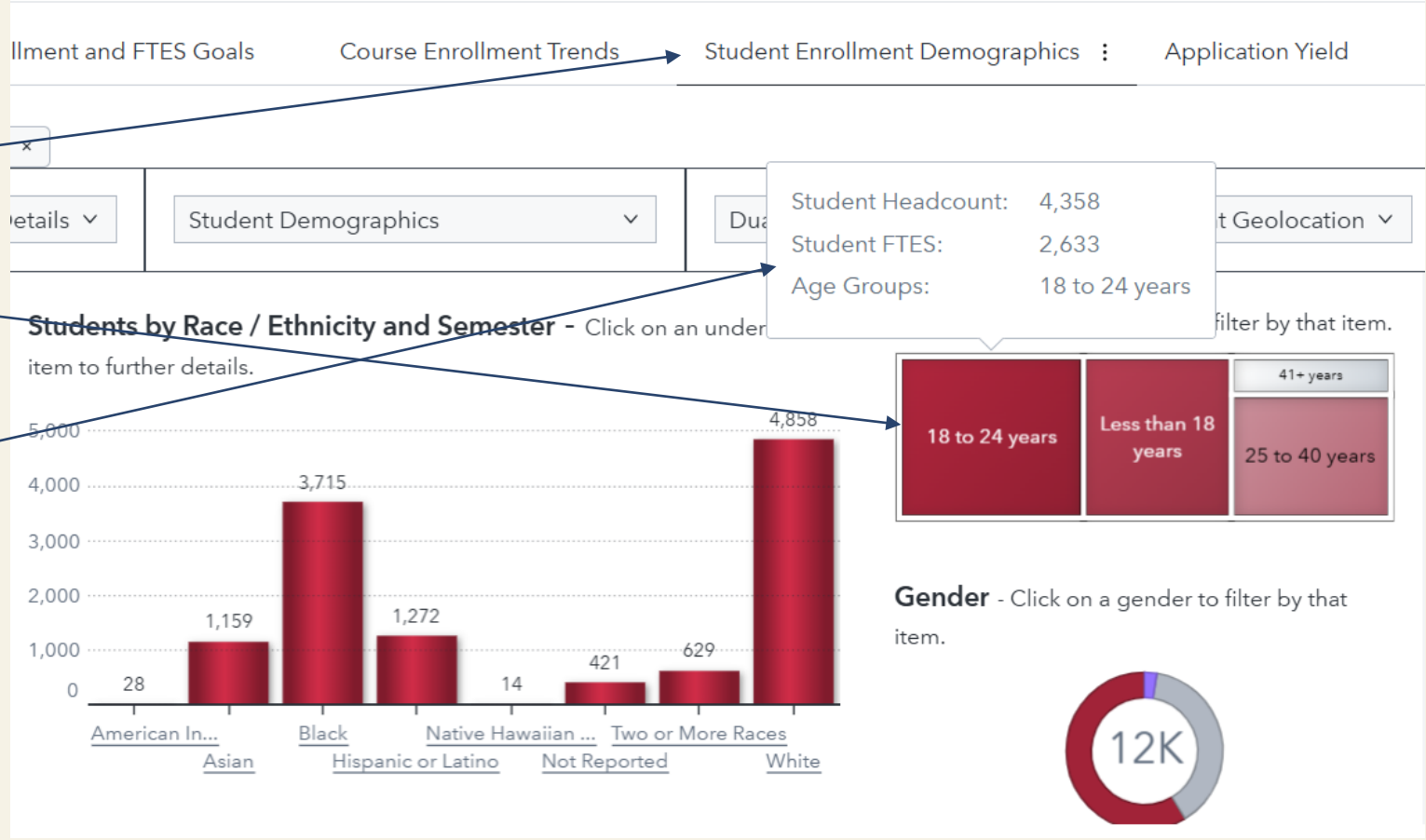
USING TOOLTIPS

Hovering to see a tooltip

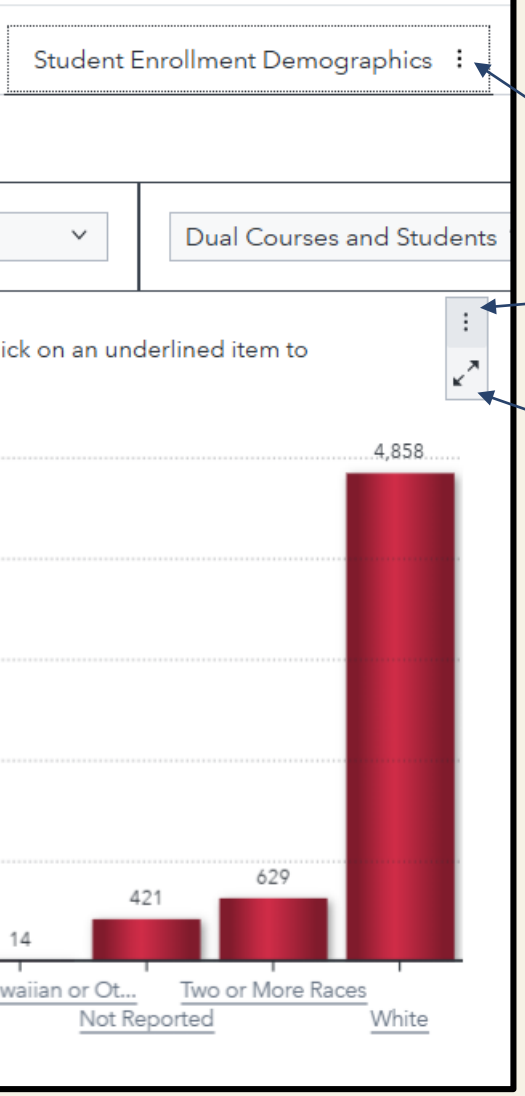
- Click on the tab named "Student Enrollment Demographics"
- Place your mouse over the red box that says "18 tp 24 years"
- Look at the information which appears in the pop-up box

Now try...

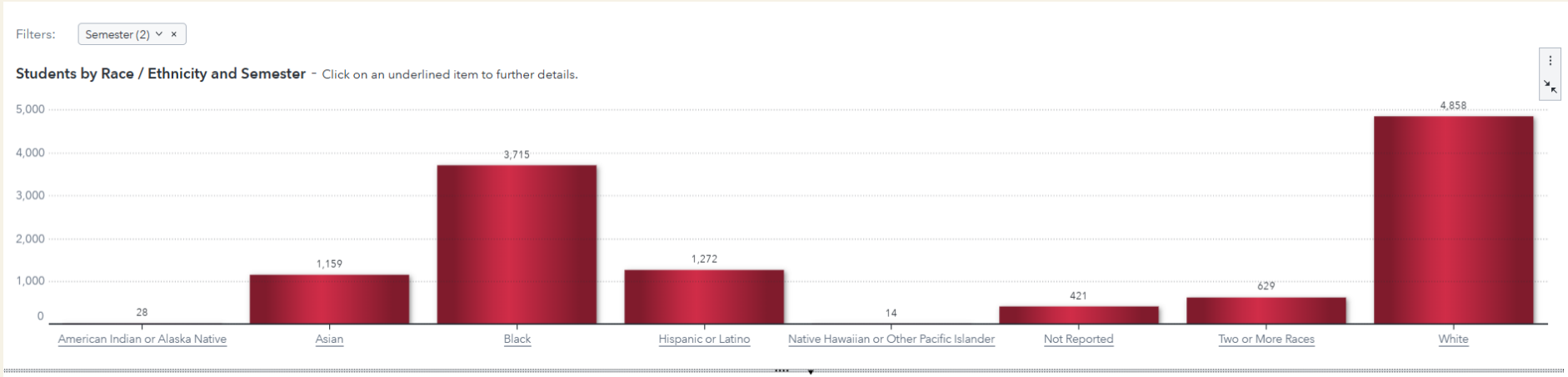
- Adding a filter and removing it
- Hoving your mouse over another visualization (chart, pie chart, map)



MAXIMIZING VIEWS



- Click on the tab named "Student Enrollment Demographics"
- Place your mouse over the upper right hand corner of the bar chart
- See the gray icon with the three dots and the two outward pointing arrows
- Click on the arrows to maximize the view



Race or Ethnicity	Student Headcount	Student FTES	Total Seats Filled
American Indian or Alaska Native	28	17	108
Asian	1,159	699	3,554
Black	3,715	2,068	12,990
Hispanic or Latino	1,272	802	4,629
Native Hawaiian or Other Pacific Islander	14	8	47
Not Reported	421	244	1,353
Two or More Races	629	383	2,196
White	4,858	2,802	15,349

ENROLLMENT DASHBOARD – KAREN'S EXAMPLE

Dashboard Usage Demonstration

Karen demonstrates how to use the enrollment dashboard to track and analyze student data effectively.

Filtering and Trend Identification

Examples include filtering data by program or term and identifying student enrollment trends over time.

Strategic Planning Support

Dashboards support strategic planning and resource allocation by providing real-time enrollment insights.

Encouraging User Engagement

Participants are encouraged to observe trends and discuss findings to enhance understanding and application.

INTERACTIVE PRACTICE ACTIVITY

Collaborative Data Review

Participants work in groups to analyze dashboard data and identify key trends and insights together.

Data-Driven Insights

The activity promotes understanding of student success metrics through reviewing visual data representations.

Building Confidence

Exercise aims to build participant confidence in interpreting institutional data for informed decision-making.

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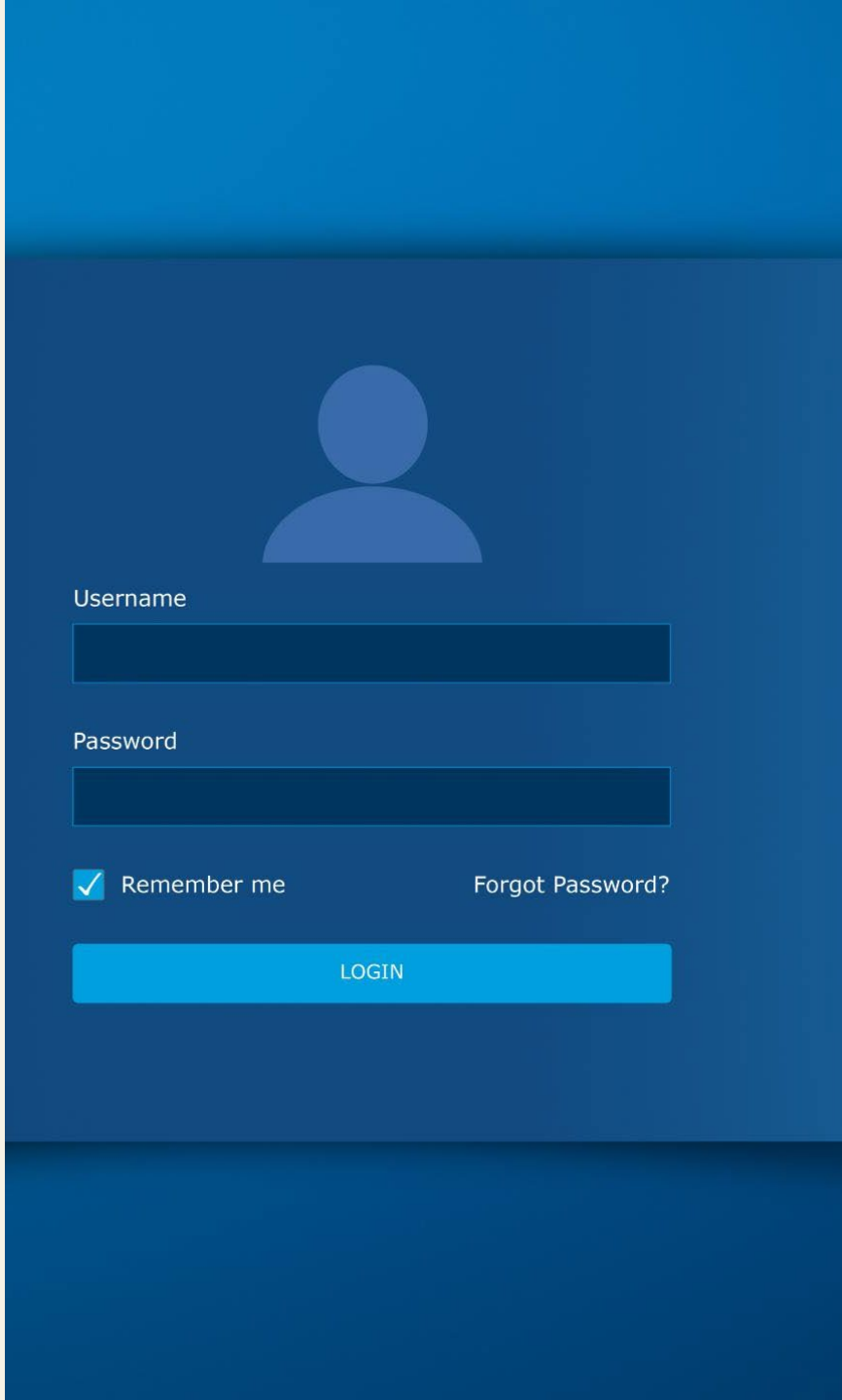
Options

College-wide Student Performance Dashboard – Gateway Math tab

Enrollment Dashboard – Student Enrollment Demographics tab

Data Engagement

- What is the tab we're viewing trying to tell us?
- Why does the college want to monitor that information?
- How does that information connect to my role?



COMMUNICATING FINDINGS

Effective Data Visualization

Selecting visualizations that clearly support conclusions helps communicate findings effectively to any audience.

Sharing Insights Transparently

Sharing data with colleagues promotes transparency and informs better decision-making across teams.

Guided Presentation Techniques

Using prompts to think through presenting insights aids in delivering clear, compelling messages to teams.

Advocating Data-Driven Strategies

Mastering communication enhances influence when advocating for data-informed decisions in departments.

WRAP-UP & REFLECTION

Reflection Activity

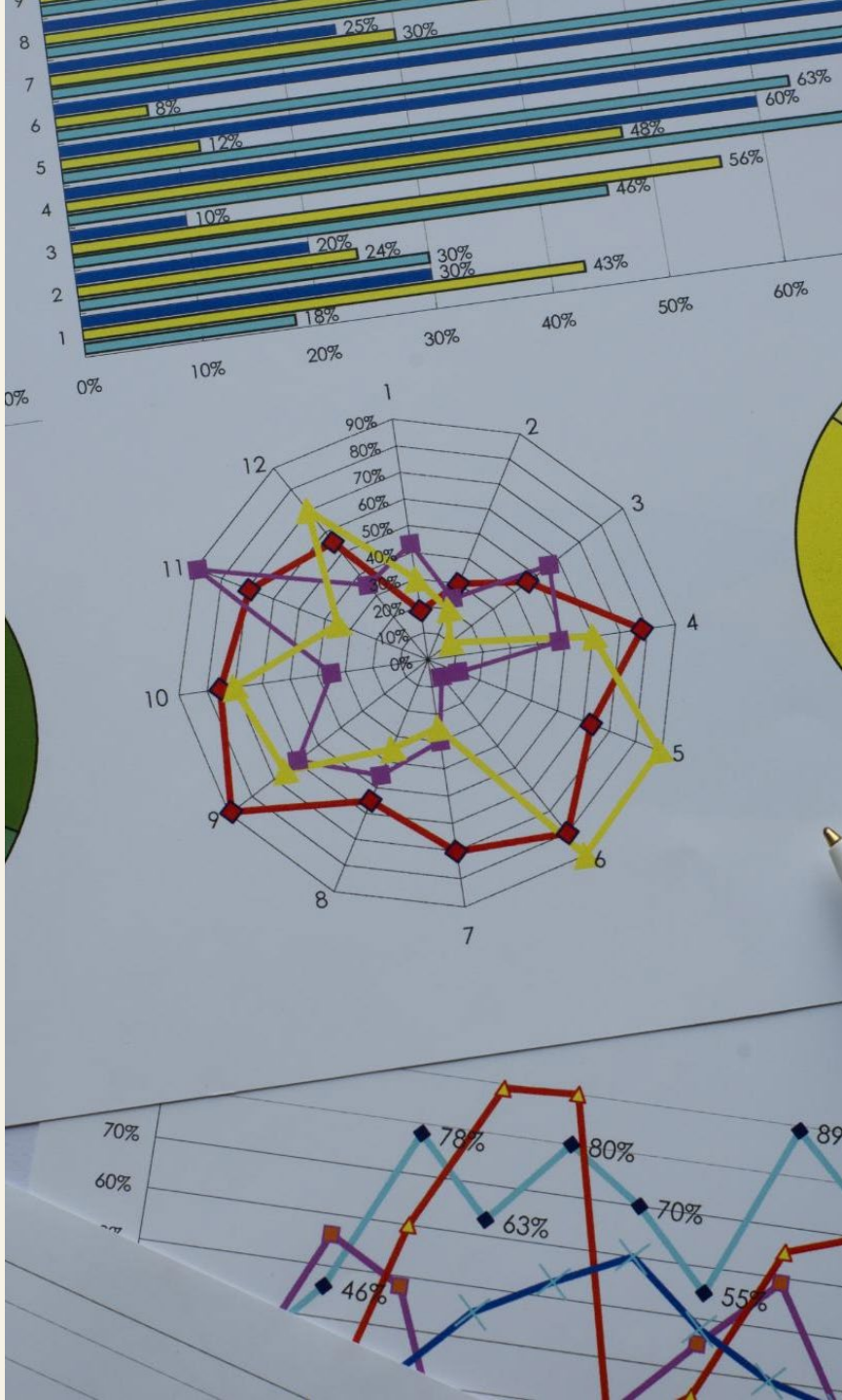
Participants reflect on dashboard skills and their application in professional roles for improved data use.

Critical Thinking Encouraged

Reflection questions prompt critical evaluation of data practices and identification of improvement opportunities.

Resources and Support

Provision of resources and contact information encourages ongoing engagement and support for data literacy.

Integration into Work

Reflecting on experiences prepares participants to integrate data literacy into daily tasks and institutional goals.