ConnectCarolina
2018 User Conference

My Course Analytics:
Enabling Data-Informed Decision Making

Presenters: Greg Harris & Robert Ricks

Making the connections

- **Viji Sathy**, Office of Undergraduate Education, Psychology and Neuroscience

- **Kelly Hogan**, Office of Instructional Innovation, Biology

- **Bob Henshaw**, ITS-Teaching and Learning, Center for Faculty Excellence

- **Rachel Serrano**, ITS-Enterprise Reporting and Data Warehousing

Agenda:

- Student Success at UNC-Chapel Hill

  — Thrive@Carolina

  — Inclusive Courses & Classrooms

- My Course Analytics Dashboard (MCAD)

  — Development

  — Piloting and Provisioning

- Demonstration

- Final Questions

Making the connections

Fall 2018 Highlights

- 30,011 Headcount
- 58% Female
- 20% URM[1]
- 40% Need-Based Aid
- 19% First Generation[2]

Professional 8%

Graduate 28%
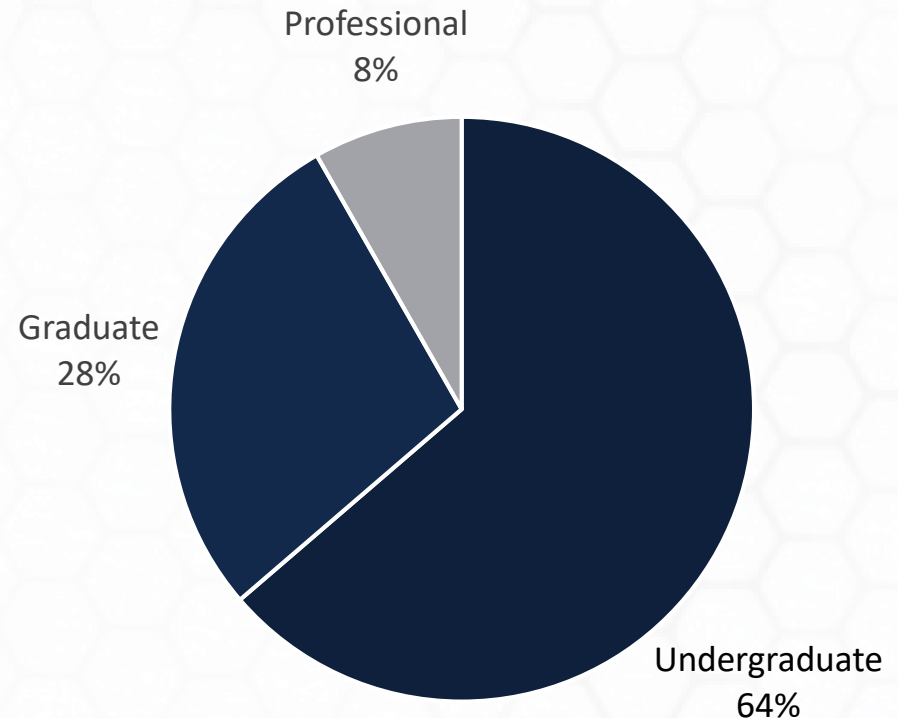
Undergraduate 64%

1. Students who self-identified with at least one of the following race/ethnicity categories, regardless of citizenship status: Black/African American, American Indian/Alaska Native, and Hispanic.
2. Undergraduates Only

4

Student Success
at UNC-Chapel Hill

- Thrive@Carolina is the University-wide undergraduate student success initiative.

- "UNC-Chapel Hill believes all admitted students can thrive in college, graduate, and grow into lifelong learners."

We believe student success includes:

- Exploring and growing intellectually
- Engaging in meaningful activities, roles, and relationships
- **Appreciating diverse perspectives as well as developing one's own identity**
- Cultivating a sense of purpose or vocation
- Developing social and emotional skills

We believe success is likely in an environment:

- Promoting a growth mindset understanding of intelligence
- Fostering self-advocacy and resiliency
- Encouraging academic excellence, integrity, and leadership
- Demonstrating concern for the well-being of the whole student
- **Affirming cultural identities and advancing inclusive excellence**

Inclusive Classrooms

An inclusive classroom means…

- The instructor and students move away from assumptions that diversity among students causes disparities…

- …and move towards the idea that learning environments and course designs lacking structure hurt students unequally.

An inclusive classroom has two structured components...

Course Design

Classroom Environment

Who's being left behind?

Who's not being heard?

Making the connections

Tips for Inclusive Course Design

- Frequent, Low-Stakes Assessments

  - Assessment Evidence from Every Student, Every Class

- Required Practice Before, During, After Class

  - Varied Learning Activities

- Syllabus with Explicit Dates/Deadlines

  - Specific Goals and Objectives

Tips for Inclusive Classroom Environment

- Anonymous Participation

  - Technology or Paper to Collect Answers

- Use Small Groups

  - Assign a Reporter

- Explicitly Promote Access and Equity

  - Syllabus Diversity Statement

Measuring the Impact

- Did those practices impact certain groups of students more than others?

- Are certain groups of students in my classes over- or under-performing compared to other groups of students?

- Where can I get data on the demographics of students in my classes? Have those demographics changed over time?

- Are the demographics of the students in my classes similar or different from the student body overall?

Aspirational Practices (AIR, 2016)

- Activating Data-Informed Faculty Decision Making

  - Individual faculty have access to data and information to support them in designing their work, with special emphasis on student learning outcomes

- Activating a Student-Focused Paradigm

  - The selection and design of institutional research is predicated on a commitment to the success of all students.

My Course Analytics Dashboard (MCAD)

Making the connections

Dashboard Steering Group (Fall 2016)

- **Abigail Panter**, Office of Undergraduate Education
- **Lynn Williford**, Office of Institutional Research and Assessment
- **Debbi Clarke**, Provost's Office
- **Kelly Hogan**, Office of Instructional Innovation
- **Viji Sathy**, Office of Undergraduate Education
- **Allison Legge**, Enrollment and Undergraduate Admissions

- **Katie Cartmell**, Student Retention
- **Candace Powell**, Student Retention
- **Bob Henshaw**, ITS Teaching and Learning
- **Sarah Gaby**, Center for Faculty Excellence
- **Phil Edwards**, Center for Faculty Excellence

16

Dashboard Requirements (Fall 2016)

- Purpose: Data Exploration and Discovery

- Tool: SAS Visual Analytics

- RLS: Instructors See Their Own Sections Only

- Limitations and Delimitations

  - Undergraduate-Level Courses

  - Fall and Spring Terms

  - Standard Letter Grade Mode

  - At Least 10 Grades Assigned

Making the connections

Dashboard Requirements (Fall 2016), cont.

- Trends Over Time

  - Before/After Changes in Pedagogy

  - Past Terms Only, Avoid Implicit Bias

- Detailed Distributions

  - Grades

  - Student Demographics

  - Intersection (Grades + Student Demographics)

Dashboard Requirements (Fall 2016), cont.

- Demographics

  - Gender

  - Race/Ethnicity*

  - Residency*

  - Pell Recipient

  - First Generation

  - Admit Type

- SAT Percentiles

Non-Resident Alien reported as a separate "International" category in Residency as opposed to Race/Ethnicity.

Making the connections

Dashboard Development (Spring 2017)

Base SAS Program
- Extract Grades
- Truncate & Reload to Oracle Tables

Oracle Reporting Views
- Add Descriptors & Derivations
- Limit to MCAD Selection Criteria

SAS Data Integration Studio Job
- Unload & Reload to SAS LASR Server

SAS Visual Analytics
- My Course Analytics Dashboard
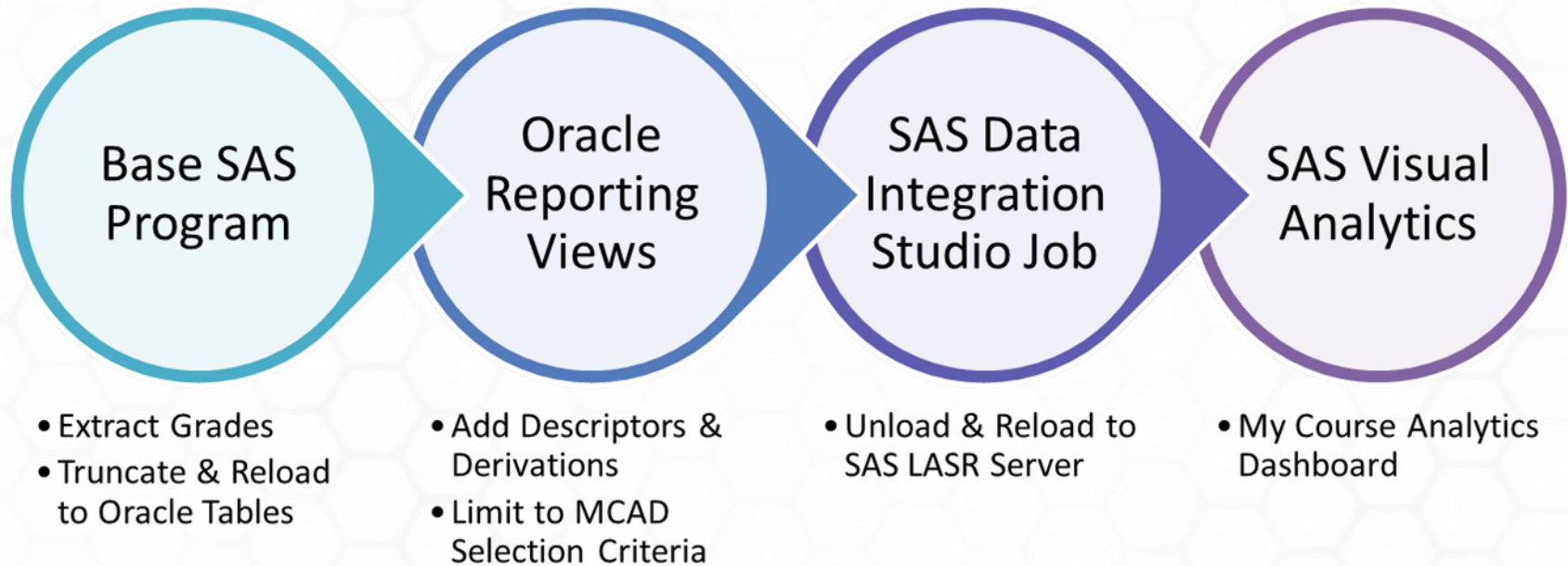
Dashboard Pilot: Phase 1 (Summer 2017)

- Personal Invitations to Selected Faculty

- "Homework" Assignment

- Feedback:

  - Enthusiasm, Want More

  - Non-Visible Diversity

  - Grades ≠ Growth, Current Students

  - "What can I do about this?"

Making the connections

Dashboard Pilot: Phase 2 (Fall 2017)

- Resources and Training

  - Website

    - Extensive FAQ

    - Resources on SOTL, Inclusive Teaching

  - Online Orientation

    - Purpose of MCAD

    - Introduce Inclusive Concepts

    - Address Implicit Bias

    - Provisioning

Making the connections

Dashboard Provisioning
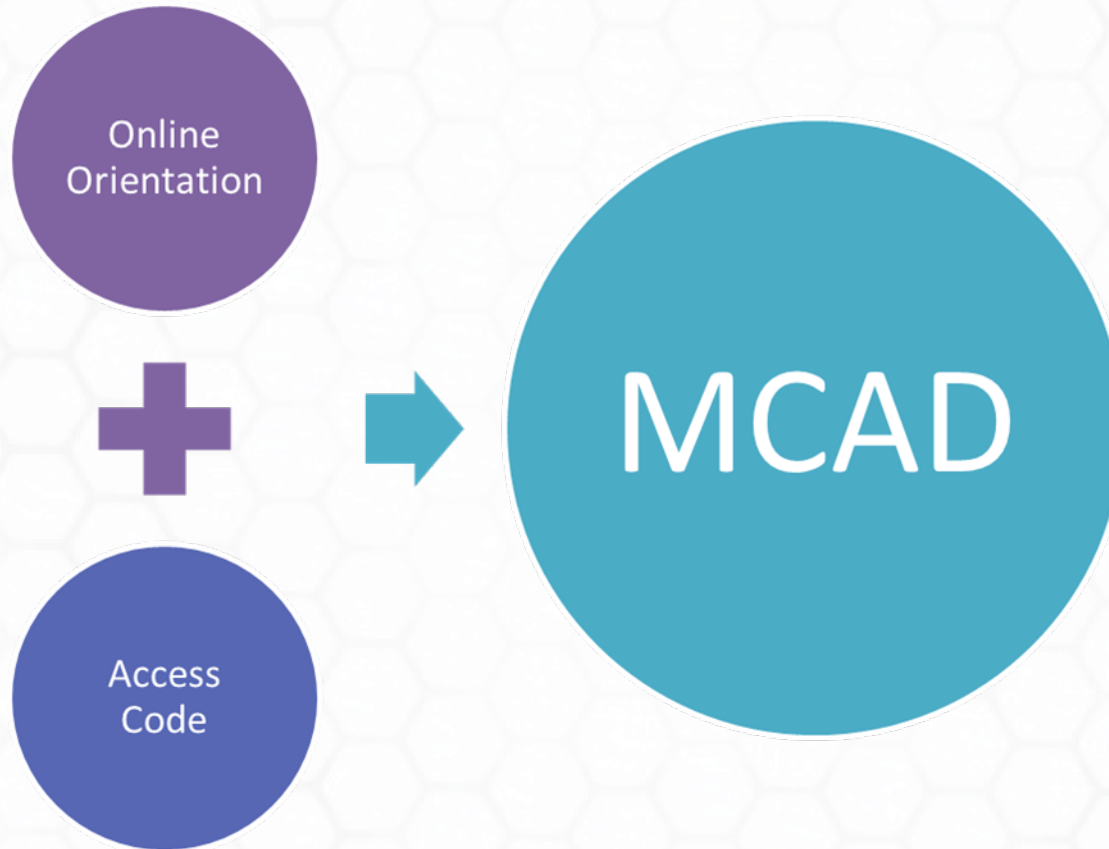
Alternative to Row-Level Security

Log in to Portal with User Name

Validated Against Active Directory (AD)
• Contains User Name and PID

AD Refreshed in LASR Daily

Global Filter on LASR AD Table
• AD User Name = User Name of Current User

Dataset Filter on MCAD LASR Table
• MCAD Instructor PID = AD PID

24

Making the connections
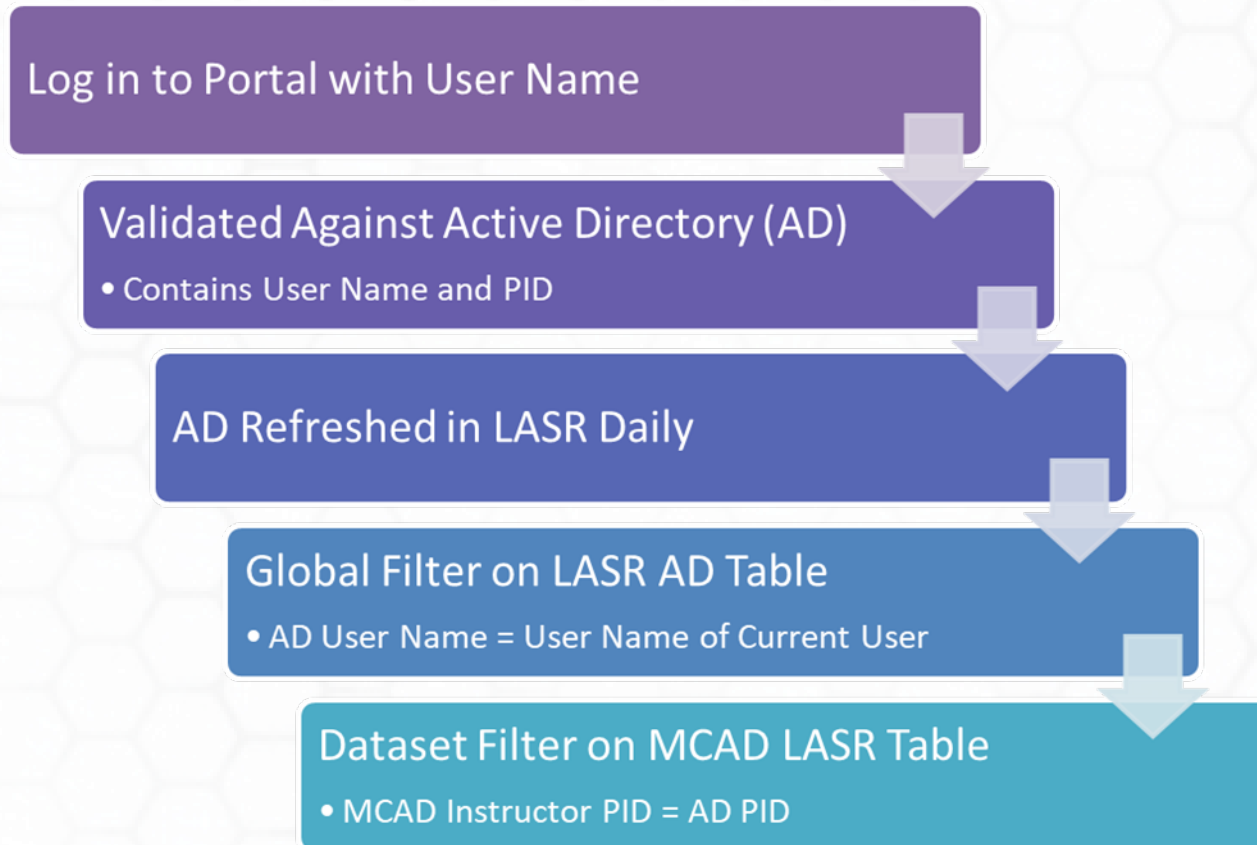
Dashboard Pilot: Phase 3 (Spring 2018)

- Invitation to Selected Departments

- Orientation and "Homework"

- Focus on Inclusive Teaching, MCAD as Tool/Resource

- Feedback:

  - Enthusiasm, Want More!

  - Low Enrollment Sections

Making the connections

Dashboard Enhancements (Summer 2018)

- New Data Elements

  - NC County Tier

  - URM

  - Age Range (Traditional/Non-Traditional)

  - ACT Composite

Making the connections

Dashboard Enhancements (Summer 2018)

- Redesigned Look/Feel

    - Color Scheme

    - Layout

    - Filters

    - Data Dictionary

Making the connections

Go Live (Fall 2018)

- Continue workshops

- Non-email Promotion

- Expand availability

- Explore provisioning

- Identify additional enhancements

- Explore other stories

Making the connections

Project Resources

- MCAD Website

  - https://cfe.unc.edu/mcad/

- OIRA Website

  - https://oira.unc.edu/

- Contact Information

  - Greg Harris, greg_harris@unc.edu

  - Robert Ricks, robricks@email.unc.edu
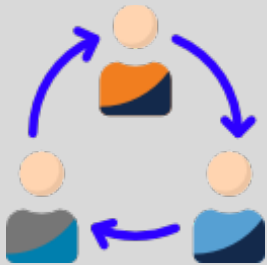
Thank You for Your Participation!