Improving Data Culture
Breaking Siloes
Building Collaboration

Commission on Information, Measurement, and Analysis
Summer Meeting
Sunday, July 14, 2024
Chicago, Illinois
Data culture - an organizational environment where data is not only valued but it is also readily accessible and used consistently to drive decision-making processes. It is a culture where data literacy is widespread, and data-driven insights are the norm rather than the exception.

https://www.datacamp.com/blog/how-to-create-data-driven-organization
What is the current data culture on your campus?

Do data siloes exist on your campus?

If so, where and why?
Panelists

**Kim Brooks**
Director, Student Success Analytics and Technologies
Bowling Green State University

**Paul Mabrey**
Director, Student Success & Enrollment Analytics & Asst.
Professor, Communication Studies
James Madison University

**Patrick Turner**
Associate Vice President, Student Academic Success
New Mexico State University

**Chris Orem**
Executive Director, Planning, Analytics, & Institutional Research
James Madison University
James Madison University:

Crossing Silos through Data Governance & Change Management
James Madison University Overview

- Situated in rural Shenandoah Valley within Virginia
- Founded in 1908 as women’s college
- 20,000+ undergraduates; 1,700+ graduate students
  - 90% retention + 81% 6-year graduation rate
- Primarily white institution
- Carnegie R2 Research Classification
Analytics Maturity Model

1. Descriptive Analytics
   - What Happened?
2. Diagnostic Analytics
   - Why Did It Happen?
3. Predictive Analytics
   - What is Likely to Happen?
4. Prescriptive Analytics
   - How Can We Make It Happen?

Adapted from https://www.phdata.io/blog/what-is-analytics-maturity-framework/
REENGINEERING MADISON

Reengineering Madison will dramatically transform JMU’s campus technology and platforms, modernizing systems and business processes.
Challenge to/for Change - Infrastructure

Cultural Challenge
- Data optimized for mandated reporting
- Office structure emphasized a generalist approach
- Federal and state reporting deadlines drove all priorities

Change Management Approach
- New data sources optimized for more mature and novel analyses
- Hiring now emphasizes specialized skillsets
- New structure delineates reporting team from decision support team
Challenge to/for Change - Culture

Cultural Challenge

- Lack of awareness about who does what with data on-campus
- Disparate and untapped data sources
  - Duplication, errors of "Truth"
- Varying levels of data fluency and some distrust or fiefdom concerns

Change Management Approach

- Meetings among data partners to identify and clarify data approaches -produced data document
  - Lots of meetings -> Analytics Retreat
- Research projects with campus partners under-resourced for data analytics
  - Lots of communication!
- Socializing research question driven approach & delivering support
New Mexico State University

APLU Pilot Program:
Building an Academic Data Culture
to Support Student Success
From Silos to Synergy: Creating a Unified Data Literacy Culture in Academia

Dr. Patrick Turner
Associate VP, Student Academic Success
Men Of Color Initiative-Coordinator

BE BOLD. Shape the Future.
Organizational Culture and Leadership Support

Leadership Support and Vision
Ensure that leadership champions the importance of data-driven decision-making and fosters a culture that values data.

Cross-Functional Teams
Create interdisciplinary teams that include members from various departments to work on data-related projects.

Existing Project
Working on an existing project fosters efficiency through leveraging established groundwork, maximizing resources, and accelerating outcomes.
Operational Practices and Continuous Improvement

Regular Data Reviews & Discussions
Hold regular meetings or forums where departments can discuss data insights, share best practices, and learn from each other's experiences.

Data Visualization & Dashboards
Develop interactive data visualization tools and dashboards that make complex data accessible and actionable for different stakeholders across the campus.
- Microsoft Power BI

Continuous Improvement
Foster a mindset of continuous improvement by regularly evaluating data practices, seeking feedback, and adapting strategies based on lessons learned.
Positive Outcomes

**MATH1250G- Trigonometry and Pre-Cal**
- Engaged instructors and students
- Improved math scores/grades
- Decrease in course repeats

**Collaboration- Provost and VP of Office of Student Success**
- Data Literacy- HLC Quality Initiative
- Faculty Fellow

**Training and Professional Development**
- Co-Curricular Assessment Team
- Data Camps
- Data workshops (monthly)
  - monthly hands-on workshops and open labs for faculty and staff
- DSSS Data and Assess Mini-Conference *(workshops and poster sessions)*
Audience participation
Question 1: What strategies might increase collaboration to support a culture change around the use of data?
Question 2:
What are some challenges or barriers might you expect when establishing a community of practice?
Thank you!