



I2: Tracking Assessment Effectiveness with LMS Data and a Power BI Dashboard at Odessa College

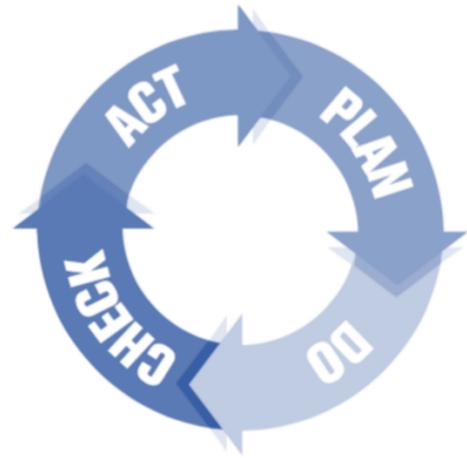
2026 TAIR 48th Annual Conference

Presenters:

Dr. Yusuf Ozdemir – Director of Institutional Research

Dr. Brian Jones - Vice President for Institutional Effectiveness

Purpose & Outcomes



- Move from *data* to *decisions*
- Translate LMS scores into faculty- and program-level insight

By the end, attendees will:

- Design a clearer assessment plan
- Understand a practical LMS → BI data pipeline
- Learn from real implementation lessons



What Is OCCMA?

Odessa College Course Mastery
Assessment (OCCMA)

- **End-of-course assessment** used in every course and section
- Aligned directly to **Course Student Learning Outcomes (CSLOs)** (ACGM, WECM, or UDCM)
- Embedded in the **Blackboard Ultra gradebook**

Purpose

- Provides **consistent evidence of student mastery**
- Ensures comparability across:
 - Sections
 - Modalities
 - Full-time and adjunct faculty



Why Does OCCMA Matter?

Odessa College Course Mastery
Assessment (OCCMA)

- It is the **foundation** of the assessment system
- Feeds upward into program and institutional review

OCCMA is just **one of three coordinated assessment layers** :

- **Course Level – OCCMA**
 - Required in every course and section
- **Program Level – PSLOs**
 - Required by SACSCOC and program accreditors
- **Core / General Education – OCSLOs**
 - Required by THECB and SACSCOC



History of OCCMA

Odessa College Course Mastery Assessment (OCCMA)

- Initial capstone - style mastery assessments piloted **Fall 2022**
- Compared to the prior year:
 - **+2% increase in success rate (Fall 2022 - 23)**
- Set the stage for scaling OCCMA institution-wide





Data Sources

Blackboard Ultra

Snowflake SQL extraction layer

Power BI semantic model

- OCCMA data created in LMS
- Extracted via Snowflake SQL
- Modeled and visualized in Power BI

ODESSA COLLEGE OCCMA DASHBOARD

Term

2025 Fall

Session

All

1,452

Total Classes

85.6%

Average Grade on OCCMAs

1,295 89.19%

Sections With OCCMA

157 10.81%

Sections Without OCCMA



ODESSA COLLEGE
**OFFICE OF
INSTITUTIONAL
EFFECTIVENESS**



Dashboard Development Process

Design & Build

- Metric definition and validation
- Visual layout focused on comparability
- Faculty, course, and department views
- Initial design
- Final design

Development support

- Used AI- assisted development for:
 - DAX refinement
 - Visual experimentation



Access, Distribution & Iteration

Access

- Role-based access (Department Chairs, Deans and Admin access to the dashboards)

Distribution

- Published to Power BI Service
- Embedded in internal OC website

Iteration

- Dashboard updated based on stakeholder feedback



Key Dashboard Views

- Faculty-level
- Course-level
- Department-level

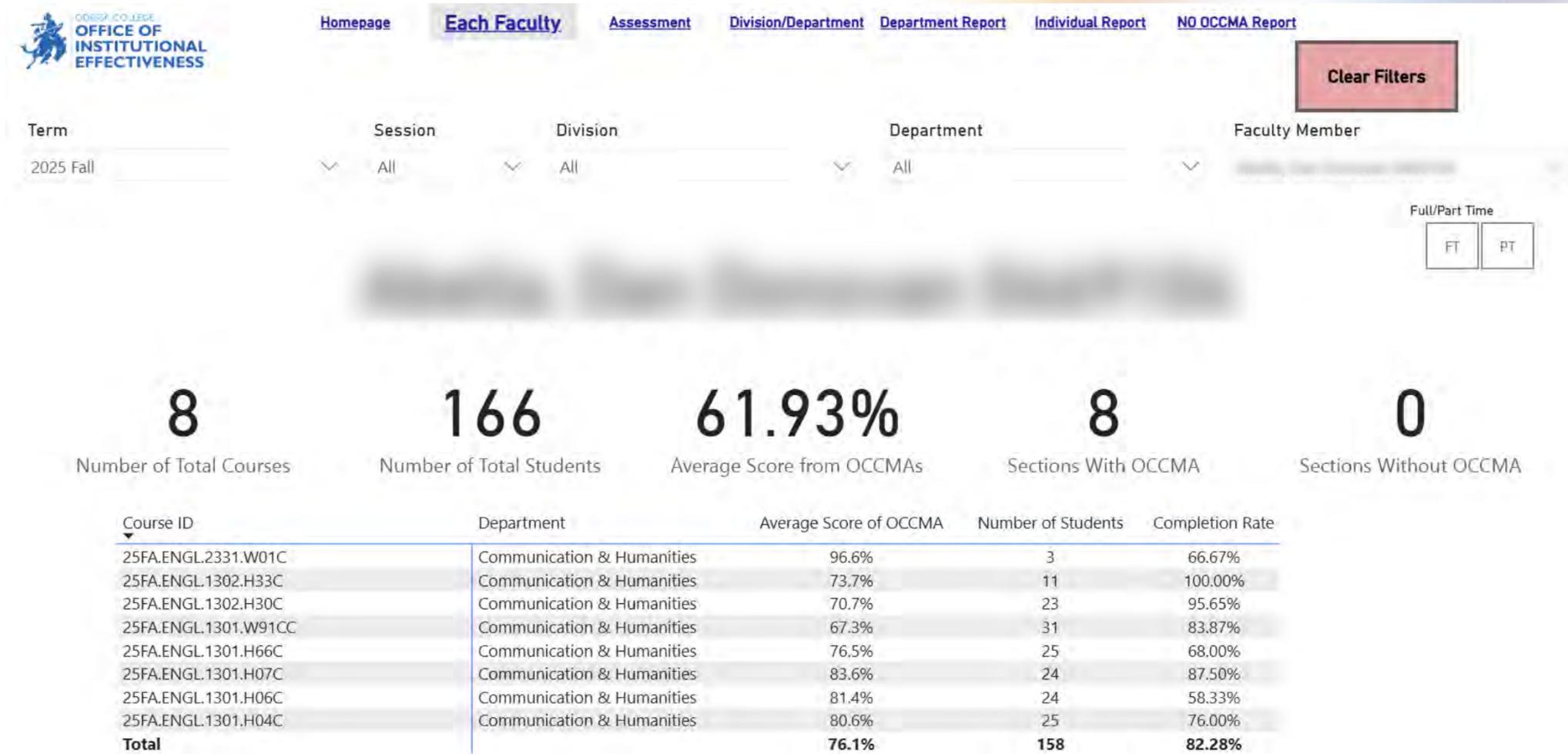
Metrics surfaced consistently:

- Average Score
- Completion Rate
- Student Count
- Section Count



Key Dashboard Views

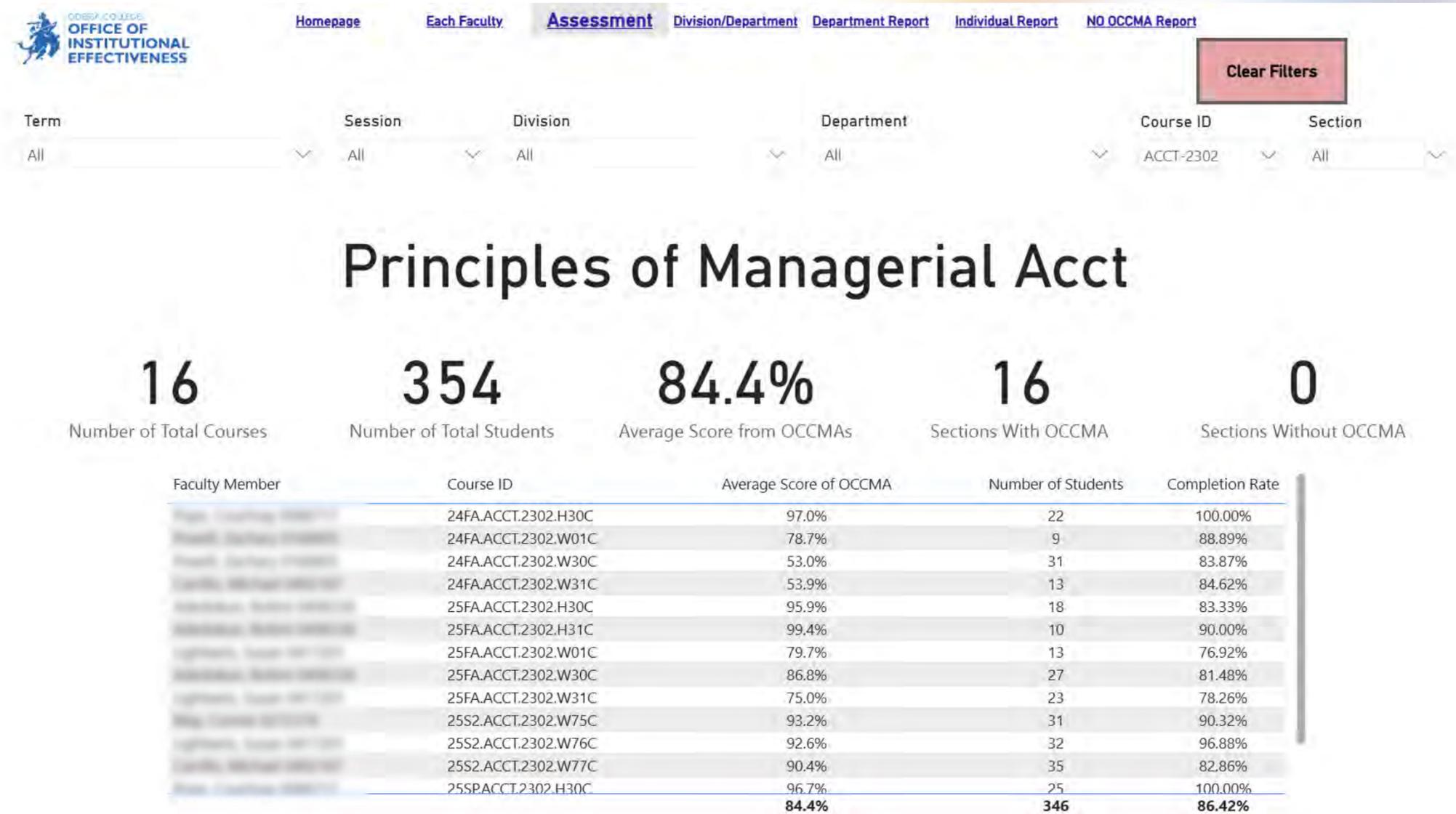
- Faculty-level





Key Dashboard Views

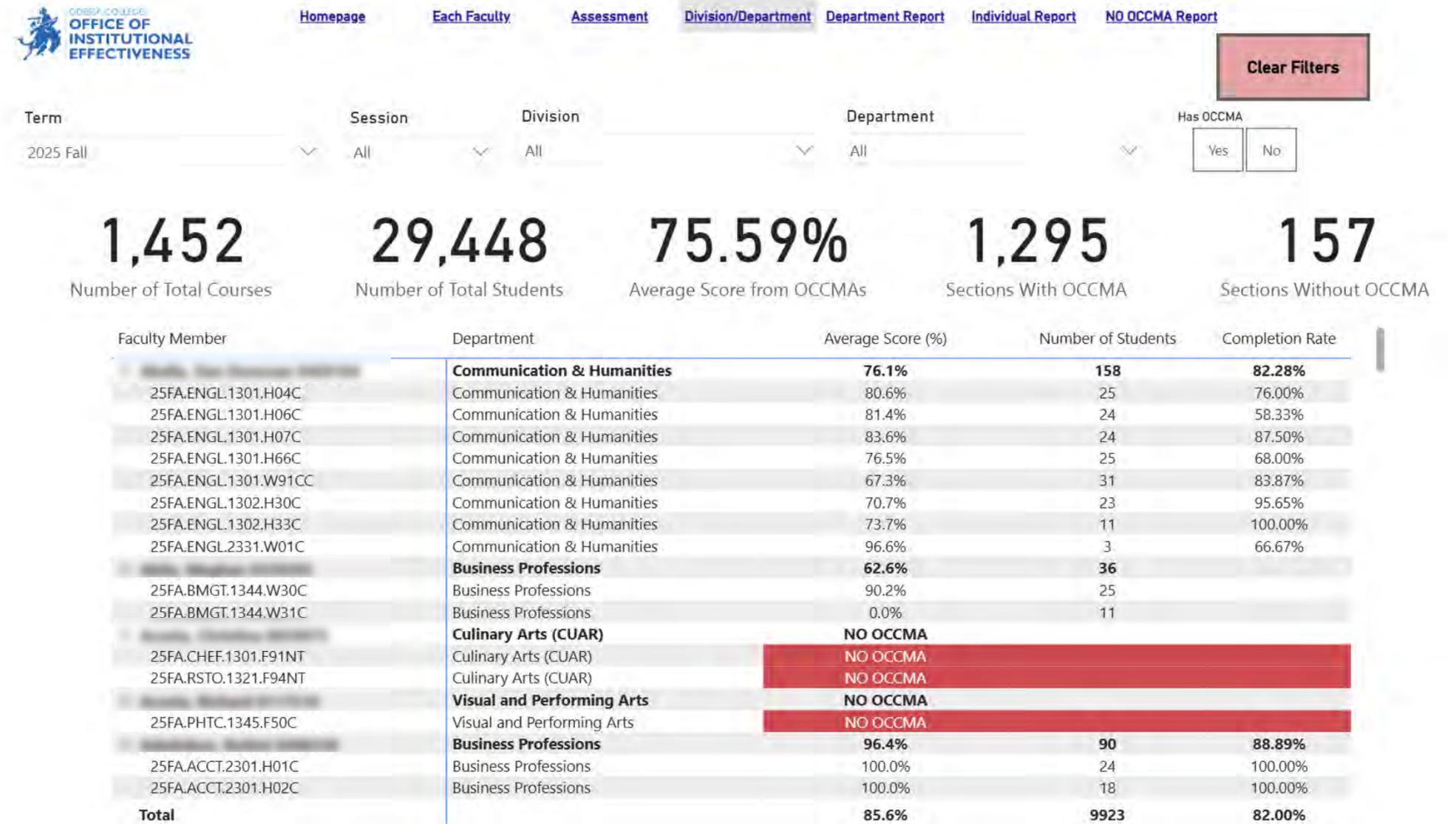
- Course-level





Key Dashboard Views

- Department-level





Challenges

Naming consistency

- OCCMA acronym misspellings prevent correct data pulls

Assessment visibility

- Hidden assessments delay data availability
- Limits proactive intervention during the term

LMS Gradebook setup

- Incorrect LMS gradebook weights assigned to the assessment

No direct integration between:

- Snowflake, Blackboard, Power BI, Zogotech
- Manual updates, delays and increased risk of error



Lessons Learned

- Standardization matters more than sophistication
- Timeliness drives usefulness
- The reports are as important as visualizing the data (Microsoft Report Builder)



Opportunities

- Clearer insight into student mastery patterns
- Stronger alignment between:
 - Course outcomes
 - Assessment design
 - Institutional goals
- Foundation for equity - minded review



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survey.

