Embedding Institutional Research and Data Analytics in Academic Policy Decisions

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Presentation Overview

Issue: IR professionals often not present when data is discussed and used to make academic policy decisions

One Potential Solution: Embed IR in group(s) that make academic policy decisions

- Example: UC Merced's Academic Policy Study Group (APSG)

  - formation and composition

  - work product examples

  - future projects

  - benefits and challenges

Q&A

Have any of the following happened to you…

You hear about a change to academic policy that you speculate could have a large impact on student success. You wonder whether/what data was used to decide on the change.

- E.g., key course perquisite was added for one of the largest campus majors

Someone asked you for data related to academic policy at your institution, which you provided. You never heard whether s/he found the data useful nor whether it was used to make a policy decision.

- E.g., information on whether course repetition impacts time to degree

You're not sure how to interpret the results from a recent policy analysis you did because you're not very familiar with the policy and/or don't have the perspectives of those who are implementing it to discuss the results with.

- E.g., academic probation rates changed drastically from one year to the next

Issues faced by IR professionals

1. Often not present during policy and practice discussions

2. Often not present when stakeholders view, interpret, and decide how to act on data

3. When interpreting data and translating it to action, often do not have advantage of perspectives of stakeholders who work with students and implement policy

One possible solution…

BUILT FOR THE 21ST CENTURY

UC MERCED IS THE NEWEST MEMBER OF THE UNIVERSITY OF CALIFORNIA FAMILY
AND IS ALREADY BUILDING A SOLID REPUTATION FOR EXCELLENCE AND INNOVATION

UC Merced Context

Newest University of California campus – opened Fall 2005

- First new American research university of the 21st century
- Current enrollment 7,336 undergraduate and graduate students – growth to 10,000 planned for 2020
- Located in San Joaquin Valley
- Minority serving institution with large proportion of first generation and low income students

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The Academic Policy Study Group (APSG)

Formed in fall 2014 by VPDUE Elizabeth Whitt

Involvement from high level administration

Membership: VPDUE, lead advisors, assessment, registrar, institutional research

Variety of perspectives

Input from those who implement policy

Standing work group that meets weekly for 90 minutes

Substantial time commitment and buy in

APSG goals and process

Charge: <u>Identify and investigate barriers</u> to undergraduate student success. <u>Make recommendations</u> for changing policy and practice.

Initial student success outcomes of interest: (1) timely progress and (2) degree attainment

Reviewed existing policies and developed a work plan for which we wanted to address

Developed list of data questions for IR

IR presented data and participated in discussion and interpretation

Examples of APSG Work Products

Reports: Products 1 and 2

- *Impacts of Unsatisfactory Course Completion and Course Repetition on UC Merced Undergraduate Success, Fall 2005 Through Summer 2014: Analysis and Recommendations*
- *Impacts of UC Merced Academic Probation Policies on Undergraduate Success, Fall 2005 Through Summer 2014: Analysis and Recommendations* (in prep)

Presentation of selected data from Report 1

DFW rates accounted for 26-37% of total Fall/Spring course enrollments

Figure 1: Percent of Total Course Fall and Spring Enrollments that Resulted in Ds, Fs, or Withdrawals by Term

Note: 10 suffix denotes spring (blue bars); 30 suffix denotes fall (green bars); Freshmen and Transfer students included

Courses with highest enrollments and DFW rates: Many are "gateway" courses

Figure 2: Percentage of D, F, and Withdrawal Grades by Total Course Enrollment
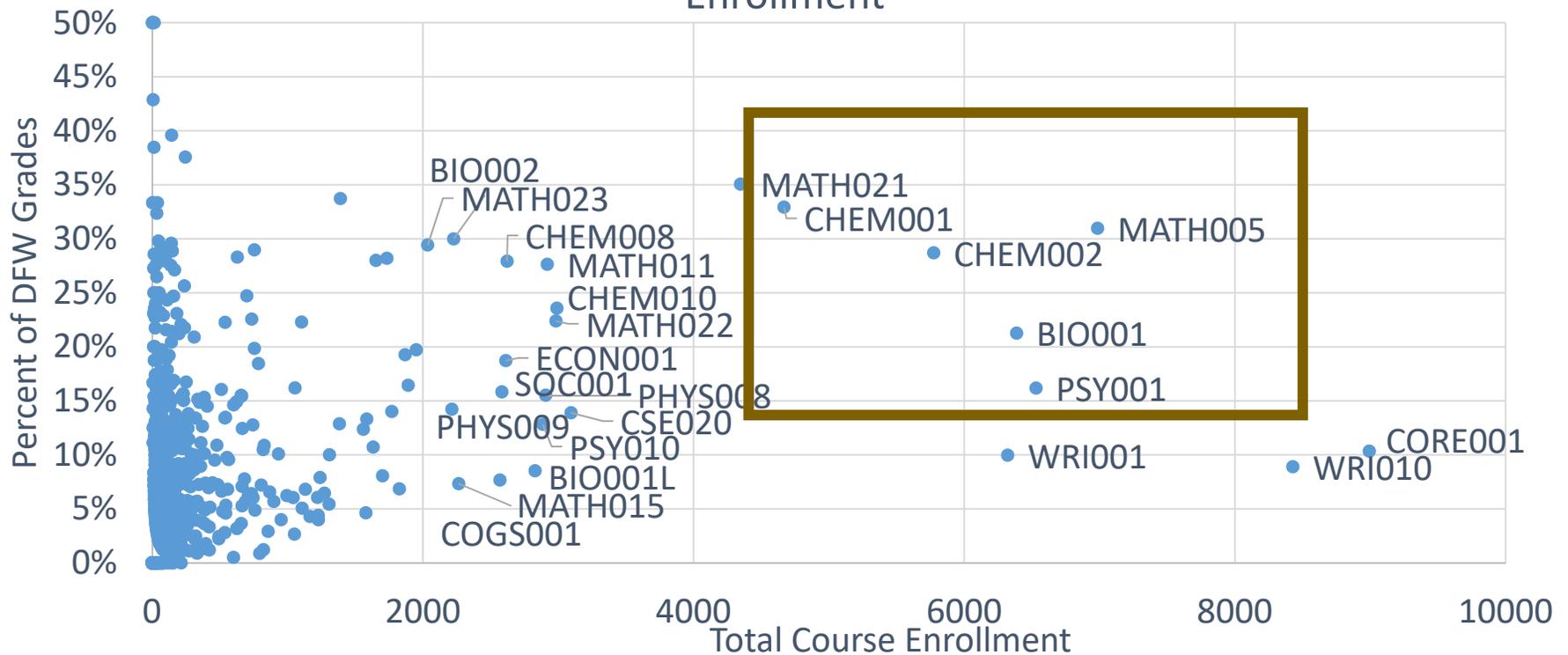
Note: Freshmen and Transfer students included; Fall 2005 to Spring 2014

Course repetition delays time to degree for grads: 2 or more repeats is problematic

Figure 3: Association Between Number of Repeated Courses and Time to Degree for Graduates

Percent Graduated by Number of Years

Point at which the pattern changes

- 0 repeats: 77%, 22%, 1%, 0%
- 1 repeat: 57%, 40%, 4%, 0%
- 2 repeats: 41%, 52%, 6%, 0%
- 3 repeats: 26%, 60%, 14%, 0%
- 4 or more repeats: 10%, 54%, 32%, 4%

Number Repeated Courses

■ 4 years or less ■ 5 years ■ 6 years ■ 7 years
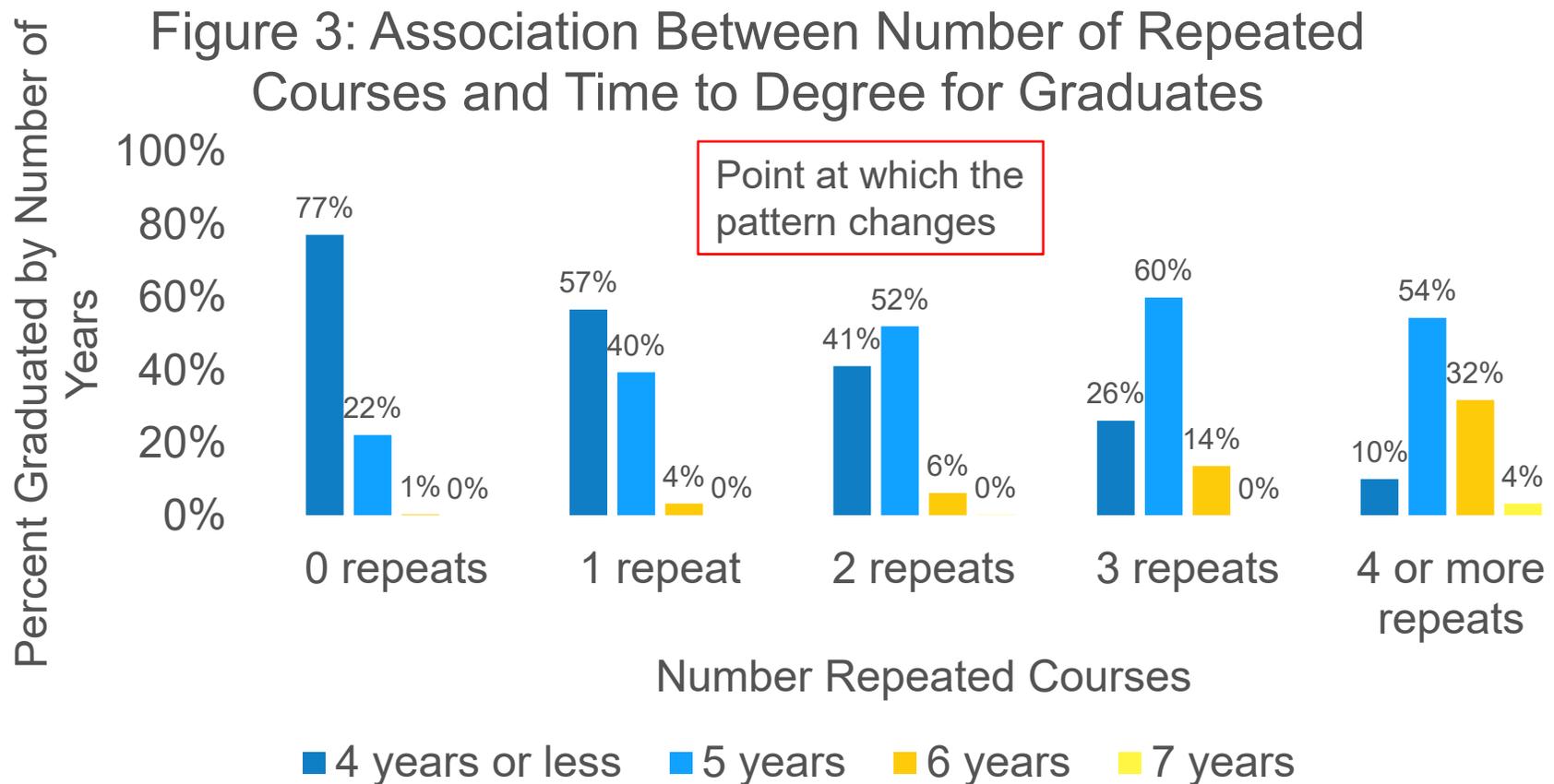
Note: only Freshmen are included

Report Data Summary

Report 1 – Unsatisfactory course completion

- It is important that students are successful the <u>first time</u> they attempt a course, particularly gateway courses.

Report 2 – Academic probation

- Students who go on probation in the first term are not likely to make timely progress to degree or to graduate in 4 years.

In sum, the first semester and first year are <u>very</u> important for student success at UC Merced.

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Current Interventions and Recommendations

Current interventions are <u>reactive</u>, but present some opportunities
- Implemented consistent messaging to students who repeat courses
    - Consistency across Schools and for undeclared students
    - Advisor and Dean practices for communicating with students about course repeats and for approving repeats
    - Focus on those who repeat 2 or more courses

Current Interventions and Recommendations

Recommendations – how can we be <u>proactive</u> to help students succeed the first time?

- Recommend faculty, academic support staff, advisor, and academic administrator review of effective student success practices and consider implementation at UCM

    - Supplemental instruction, active/collaborative instruction, mandatory tutoring, summer bridge, writing center, training for peer success mentors/educators, examination of midterm grades

Review of data by academic programs and Deans

- Share the data with those involved in student success efforts

Product 3: First Year Student Success (FYSS) Workshop

General Agenda:

- Provided data from the literature on student success
- Shared UC Merced data on importance of first year
- Facilitated introductions and small group discussions about programming
- Provided an overview of logic models and logic model practice to assess student success programming
- Closed with group conversation about next steps

Collected notes and observations throughout

Event Website: http://ue.ucmerced.edu/student-success/workshops/fyss2016

Product 3: First Year Student Success (FYSS) Workshop

For Participants:

- Provide data on importance of first year
- Promote shared framework for student success
- Provide a tool (logic model) to assess activities
- Facilitate conversations to promote collaboration and integration
- Build a community to promote student success

For APSG:

- Obtain information about programming
- Receive feedback regarding the data
- Understand information and resources needed to move forward success efforts
- Determine how information should be shared with campus leadership

Event Website: http://ue.ucmerced.edu/student-success/workshops/fyss2016

Current and Future Work Products for APSG

Produce report summarizing APSG charge, work products, and future plans
- Group composition has evolved over time

Follow up to FYSS workshop
- Student success website and listserv; myth busters report; logic model working groups

Contribute to development of campus definition of student success

Predictive analytics for identifying students at risk of poor academic standing at end of first term
- Examine midterm grades

Current and Future Work Products for APSG

Future policy analyses:

- Recommendations to facilitate major declaration for undeclared students
- Recommendations for redirecting students who are unsuccessful in STEM majors into alternative majors
- Recommendations for changes to academic standing policy

Help students make connections between academic program and post-baccalaureate plans

- Enhance communication between academic advisors and career center

Academic Policy Study Group Benefits

Addresses several common issues for IR practitioners:

1. Present during policy and practice discussions
2. Present when stakeholders view, interpret, and decide how to act on data
   - Dispel myths and/or support hunches with data
   - Develop plan for evaluating policy/practice changes
3. Advantage of perspectives of stakeholders who work with students and implement policy when interpreting and acting on data
   - Shared insights about data and strategies for addressing barriers

Academic Policy Study Group Challenges

Important characteristics of group composition and function
- Influential leadership and buy in from group members
- Group dynamics facilitate questioning of assumptions and sharing of ideas

Not clear how best to share data and recommendations with the campus community
- Create a culture of data use and sharing

Other groups discuss student success policy and practice

Difficult to facilitate change in a complex environment
- We make recommendations to decision-makers
- We implement changes to practice but not policy
- Siloed efforts and challenges of cross unit communication

Thank You!

- Acknowledgements
  - APSG, particularly Elizabeth Whitt
  - IRDS colleagues, particularly Mike Wrona

Q & A