

Provost's Initiative Planning for Student Academic Success: Final Report Discussion

Mike Solomon

ADG: 11/10/23

A student's experience at U of M has many dimensions

Well-Being & Mental Health

Increase our support for holistic mental health and wellness to ensure U-M students thrive and achieve their goals. We make investments that expand access to effective health-supportive programs and resources.

Example: Providing mental health referral training for faculty, staff, student peers

Academic Success

Address performance gaps and help all students succeed in their majors and graduate on time.

Example: Increasing student participation in Success Connects program.

Identifying academic policies that impact wellbeing and mental health.

Engagement

Help students plug into the rich campus array of engagement opportunities; those who participate stand to boost their learning, persistence, and satisfaction.

Example: Piloting the Wolverine Life app to provide students enhanced info about campus events & opportunities

Charge and Committee Approach

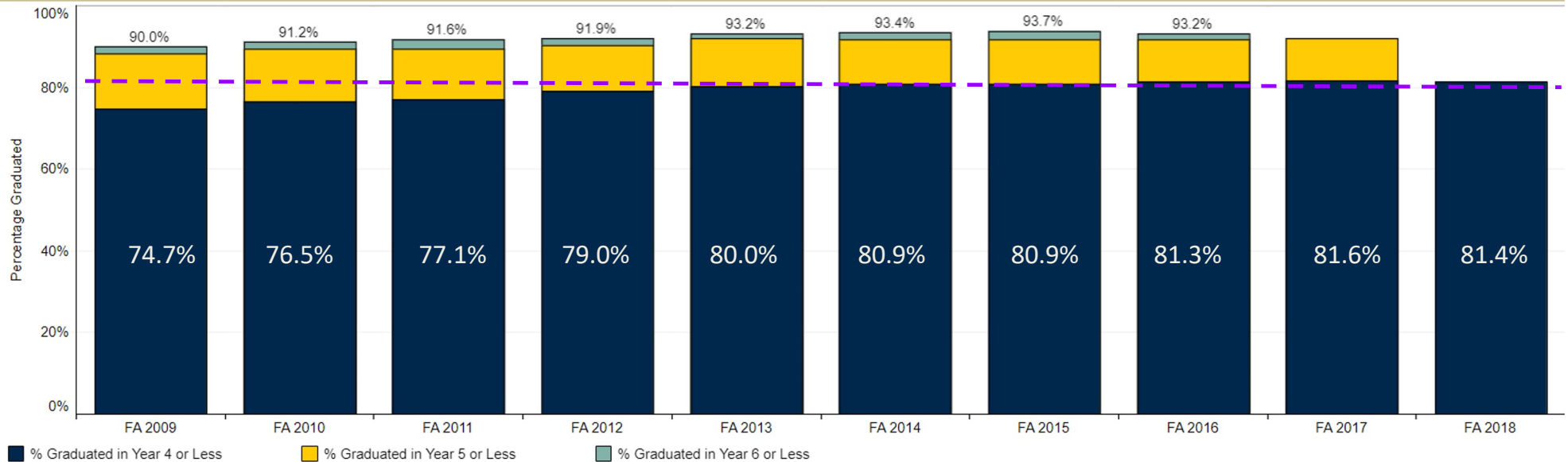
- Charge
 - Integrate research and analytics on early momentum and student persistence with working experience of advisors, faculty, and student affairs professionals to recommend pilot activities to the Provost
- Membership
 - Members include faculty, advisors, and student affairs professionals
- Approach
 - Analysis of research on student academic success and early momentum
 - Discussion of research with campus groups such as advisors, associate deans, & the academic policy work group of the Well-Being Collective
 - Review of practices at peer institutions

A very basic measure of success: graduation rates

All Freshman Grad Rates Trends

Race/Ethnicity Group: All | Residency: All | Sex: All | Joint Programs: All

Most recent years will not show comparable percentages due to incomplete 5 and 6 year graduation rates.



By this measure, we're doing well. The average six year rate for public AAU institutions is 80.9%

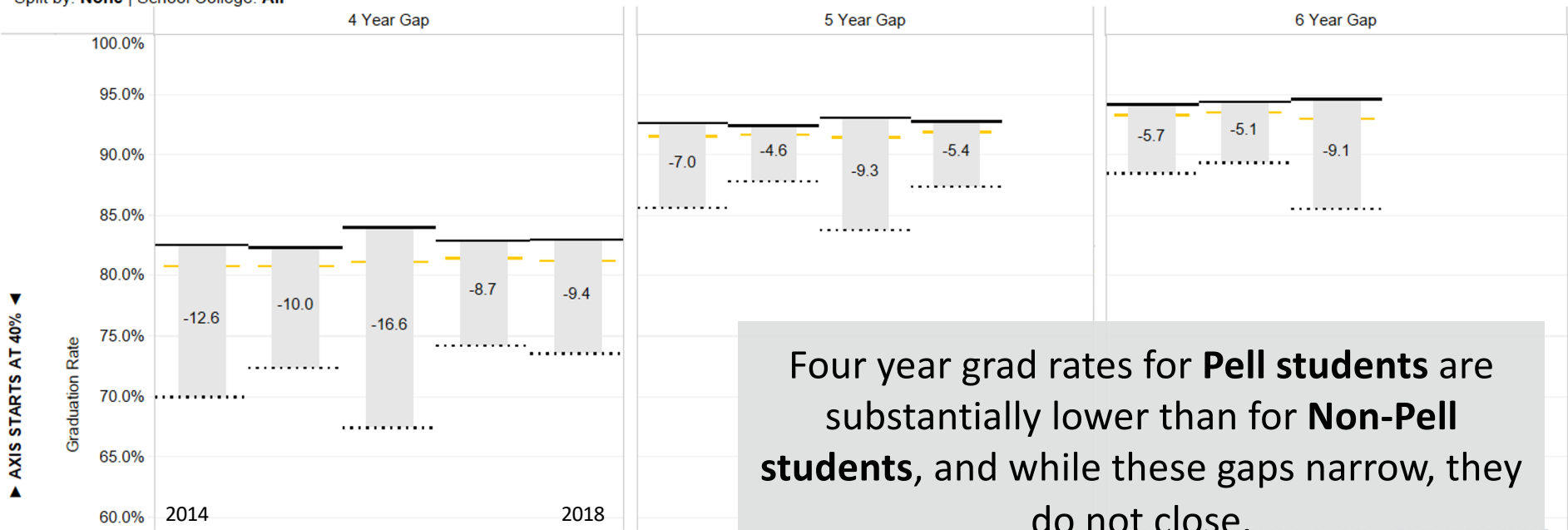
Comparing Non-Pell and Pell eligible students

Interactive Filters

Student Attribute Pell	Split by (rows) None	School / College All	Non-Pell _____	U-M Overall Grad Rate _____
			Pell	

Pell Recipients vs Non-Pell Recipients Students Graduation Rates & Gap

Split by: **None** | School College: **All**



Four year grad rates for **Pell students** are substantially lower than for **Non-Pell students**, and while these gaps narrow, they do not close.

An example from Powered by the Publics

Institutions in the BTAA Cluster

- Indiana University-Bloomington/System
- Rutgers University-New Brunswick
- The Pennsylvania State University
- University of Illinois at Urbana-Champaign
- University of Iowa
- University of Minnesota-Twin Cities
- University of Nebraska-Lincoln
- University of Wisconsin-Madison

Generic Course Name	Average DFW Rate	Non Pell DFW	Pell DFW	Majority DFW	URM DFW	Female DFW	Male DFW	Non-First Gen DFW	First Gen DFW
College Algebra	32.4%	30.3%	31.5%	27.5%	33.9%	28.3%	36.5%	28.2%	34.0%
Precalculus	28.1%	28.0%	26.6%	27.8%	25.3%	29.5%	26.8%	25.9%	22.5%
Calculus 1	33.2%	31.2%	41.9%	31.9%	39.6%	30.2%	34.9%	32.7%	38.2%
Calculus 2	23.8%	23.5%	28.2%	21.0%	30.3%	18.3%	26.4%	23.7%	23.6%
Business Calculus (without proofs)	23.6%	21.0%	36.6%	21.2%	35.1%	21.8%	24.6%	21.3%	31.6%
Intro Statistics (with Algebra)	13.9%	12.3%	19.8%	12.5%	21.8%	13.5%	14.3%	12.2%	20.0%
Introductory Biology	15.1%	12.7%	25.4%	13.7%	25.3%	14.4%	16.2%	12.9%	22.2%
Introductory Chemistry	25.1%	21.1%	32.9%	21.5%	38.1%	22.3%	30.3%	21.2%	33.5%
General Chemistry 1	23.0%	20.8%	31.3%	21.1%	31.7%	23.0%	23.0%	20.8%	29.0%
General Chemistry 2	16.2%	14.6%	25.7%	15.2%	26.0%	16.2%	16.3%	14.0%	25.3%
General Physics (with calculus)	13.8%	12.9%	18.3%	14.1%	21.4%	12.1%	14.3%	12.8%	16.7%
Physics: Electricity & Magnetism	15.0%	13.3%	22.1%	15.5%	23.1%	15.2%	16.7%	14.0%	19.0%
Introductory Coding (for STEM majors)	24.7%	23.3%	15.4%	22.1%	31.7%	24.0%	25.0%	23.0%	32.5%
Introductory Psychology	12.0%	10.5%	18.1%	12.5%	19.1%	9.8%	14.9%	10.8%	15.2%
Introductory Sociology	10.0%	8.7%	14.9%	11.2%	14.5%	8.0%	12.6%	8.6%	16.7%
Principles of Macroeconomics	15.3%	14.1%	24.0%	13.0%	23.2%	14.5%	15.6%	14.2%	20.1%
Principles of Microeconomics	15.8%	14.1%	24.6%	15.0%	27.8%	17.1%	15.0%	13.7%	24.2%
Introductory Accounting	14.2%	13.8%	17.7%	11.8%	22.6%	13.9%	14.4%	12.9%	18.0%
Introductory English: Writing & Rhetoric	7.5%	6.6%	10.3%	8.5%	11.1%	6.0%	8.9%	6.5%	10.9%
Business Communication	3.9%	3.7%	4.4%	4.8%	5.0%	2.8%	4.6%	3.5%	5.0%
Notes:									
Green cells signal lower the average rates for the course and red cells signal above average rates for the course									
Rates are the sum of D and F grades plus withdrawal from the course after drop deadline divided by total census date enrollment for each cohort*									
Course codes and titles varied across institutions. Course descriptions were analyzed to capture and collect data on most similar courses									

Credit: Tim McKay, ASSET

Table Source: Michaels & Milner, APLU

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Average DFW Rates Across Cluster in Listed Courses by Subgroup, Spring 2019

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Calculus 2	23.8%	23.5%	22.8%	21.0%	30.3%	18.3%	26.8%	23.7%	23.6%
Business Calculus (without proofs)	23.6%	21.0%	36.6%	21.2%	24.8%	21.8%	24.6%	21.3%	31.6%
Intro Statistics (with Algebra)	13.9%	12.3%	19.8%	12.5%	21.8%	13.5%	15.3%	12.2%	20.0%
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Introductory Accounting	14.2%	13.8%	17.7%	11.8%	22.6%	13.9%	14.4%	12.9%	18.0%
Introductory English: Writing & Rhetoric	7.5%	6.6%	10.3%	8.5%	11.1%	6.0%	8.9%	6.5%	10.9%
Business Communication	3.9%	3.7%	4.4%	4.8%	5.0%	2.8%	4.6%	3.5%	5.0%

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Note first the overall high DFW rates: many students do not successfully complete these courses

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But that's not all. There are substantial and various outcome inequities in most of these courses

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Table Source: Michaels & Milner, APLU

Research and Theoretical Foundations

- Review of Student Success Research and Data Analytics
 - 4- and 6-year graduation rates at U-M are healthy (81% and 93%)
 - However, wealthy, white, and continuing-generation students graduate on time more often than others
 - Disparities range from 10%-20% in 4-year programs, and persist at 6-years
 - “DFW” rates in large-introductory courses show intersectional patterns of inequity that parallel those seen in graduation rates
- Theoretical Frameworks Drawn From Higher Education Research
 - Dominant models of student success often place the onus on individual to support their own retention through involvement and integration
 - This committee draws upon validation theory (Rendón, 1994)
 - Validation theory centers institutional responsibility for student success

Committee Findings of Guiding Principles

- Center Students from Marginalized Communities
 - *Take a universal design approach; expand academic coaching programs*
- Create Training that Embeds a Validation Approach
 - *Focus on instructors and advisors, especially in large lecture courses*
- Leverage Research and Technology
 - *Expand course and major equity reports; invest in systems for advisors*
- Pursue Early Interventions
 - *Taking 30 credits in the first year correlates with success; research has not yet identified any group harmed by this approach*
- Produce Better Wayfinding and Access
 - *Create a centralized office to support this work*

Committee Key Recommendations

- Organizational Change
 - *Create a vice provost position and team to support this work*
 - *Invest in academic advising staff, including expanding academic coaching*
 - *Create a multi-year campus wide initiative in student success*
- Pilot Programmatic Activities and Initiatives
 - *Apply campus expertise to develop validation approach training*
 - *Pilot programs in which advisors support first-year early momentum*
- Future Research Activities
 - *Create new research/practice collaborations and data infrastructures*
 - *Research experiences of academic probation*

Questions for Discussion

- What programs and staffing are available in your school/college or area that you would be interested in engaging with the academic student success effort?
- Given the report findings and the needs you perceive, what advice would you offer for the construction of this central, coordinated effort?

Committee Membership

Name	Title, School/College/Unit
Blaire Beuche	Assistant Director, Foundational Course Initiative, Center for Research on Learning and Teaching
Lauren Clarkson	Academic Success Director and Adjunct Lecturer in Business, Stephen M. Ross School of Business
Kate Fitzpatrick	Associate Professor of Music and Associate Dean for Undergraduate Academic Affairs, School of Music, Theatre & Dance
Nicholas Henriksen	Associate Professor of Spanish, Department of Romance Languages and Literatures; Associate Professor of Linguistics, College of Literature, Science, and the Arts
Tim McKay	Arthur F Thurnau Professor, Associate Dean for Undergraduate Education; Professor of Physics; Professor of Astronomy, College of Literature, Science, and the Arts; Professor of Education, School of Education
Elissa Minke	Undergraduate Academic Advisor/Counselor Senior, School of Nursing
John Montgomery	Arthur F. Thurnau Professor, Margaret and Herman Sokol Professor of Synthetic Chemistry; Professor of Chemistry, College of Literature, Science, and the Arts
Rosie Perez	Associate Professor of Higher Education, School of Education
Will Sherry	Director of Strategic Initiatives, Office of the Vice President for Student Life
Connie Tingson Gatuz	Associate Vice President for Student Life, Office of the Vice President for Student Life
Kierra Trotter	Director, Comprehensive Studies Program, College of Literature, Science and the Arts
Kerri Wakefield	Director of the Engineering Advising Center and Intermittent Lecturer in Education, School of Education
Mike Solomon	Dean, Rackham School of Graduate Studies; Vice Provost for Academic Affairs – Graduate Studies (Chair)
Zarinah Aquil	Office of the Provost, Project Manager (Administrative Lead)