



Advancing Equity-Minded Student Success through an Institutional Strategy to Utilize Existing Student Data

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Assessment & Research




University of Arizona

- Located on the unceded land of the Tohono O'odham and Pascua Yaqui nations
- Large Public R1 University
- Land Grant
- 45,000+ students across campuses
- Only one of four HSIs that is also a member of AAU

Student Data Insights Strategy Team

The Student Data Insights Strategy Team hosts equity-minded discussions with University of Arizona student leaders, faculty, staff, and administration **centered on data to better understand and support the student journey.**

Data-informed insights are presented with recommendations to **inform the development of policy, practices, and services that enhance the student experience and their success.**




Key reasons for launching the new initiative

Equity-minded approach to produce equitable student outcomes	Comprehensive approach vs. separate assessment of persistence, climate, & learning	Support of strategic plan and mission fulfillment	Utilize existing data and assessment results
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Student Data Insights Strategy Team

Key Components

- Identify a student issue, experience, or population each year informed by relevancy, timeliness of data, and aligned to strategic plan and values
 - Team members are identified based on topic being examined
 - Intentionally involve students (and faculty in second year)
 - Year-long methodological process to triangulate insights, contextualize findings, and share and act on results
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2019-2020 Topic: Pell Grant Student Experiences & Success


Pell Pledge Grant – New Initiative

- New financial aid award for AZ Residents to cover base tuition for four years
- Expected increased in Pell students with continued support of experiences & success

Strategic Plan

- Increase the percent of enrolled Pell Grant recipients from 33% to 38%
- Close the achievement gap in graduation rates between Pell Grant recipients and non-Pell Grant eligible students
- Lead nationally in Pell-recipient degree completion

Purpose & Values

- Working together to expand human potential; explore new horizons and enrich life for all.
 - Fulfilling our Hispanic Serving Institution designation and supporting Servingness
 - Integrity • Compassion • Exploration • Adaptation • Inclusion • Determination
- 

Method



August –
September

October

November

December

February –
March

April –
August



Consolidation of
institutional data,
assessments, &
research



Synthesis of
data,
assessments
& research



Draw
inferences



Conduct
focus groups



Develop
insights



Share & take
action on data-
informed Insights

Data Sources



Consolidation of institutional data, assessments, & research

Global

- Research
- IPEDS
- **Institutional Data:** Demographics, Enrollment, Retention, Completion

Local

- **Department and Program Participation:** Student Engagement & Career Development, Housing and Residential Life, Thrive Center, THINK TANK, Fraternity and Sorority Programs, Campus Recreation, Campus Pantry, Health Services
- **Surveys:** Student Digital Engagement Survey (2019), Student Services Fee (2019), The Impact of Student Employment on Student Success Report (2018), Campus Climate Survey (2016), National Survey of Student Engagement (2018), Graduating Senior Year Survey (2018)

Novel

- **Retention analysis on Pell Grant Students***
- **Focus Groups:** Junior/Senior Pell Recipients*
- Professional expertise and experiences
- Personal experiences

Existing Research



Consolidation of
institutional data,
assessments, &
research

SOCIAL SUPPORT FOR LOW IN-COME STUDENTS

College success requires skills beyond those that are overtly academic. Research suggests that college students benefit from non-academic supports that help them create meaningful social relationships, develop the ability to navigate the campus and meet its various expectations, and address conflicting demands of work, family, and higher education. Programming that provides scaffolding to help students succeed in college should include social supports, ideally embedded within students' early academic experience rather than administered separately (Karp, 2011).

As with academic support, social support must be particularly strong during the first-year experience to propel students into the second year and toward degree completion. Also as with academic support, ideally mechanisms should be enmeshed within larger policies and programming at the institutional level, and at-risk students should be required to participate in such programming.

Low-income, first-generation students need significant support as they transition into college—support that validates their capabilities to succeed and sense of social belonging (Engle and Tinto, 2008; Karp, 2011). In a study comparing the experiences of first- and second-generation college students, Pike and Kuh (2005) note that “first-generation students are less likely to develop strong relationships with other students and to become involved in campus clubs and organizations.” (p. 277) Institutions can best serve this population by implementing special programming that includes on-going engagement with faculty and staff and regular opportunities to connect socially with peers from similar backgrounds. (Engle and Tinto, 2008)

- Established strong social connections among students and social support at the institutional level are associated with the qualities of integration and commitment that yield academic success in retention, good grades, and persistence to degree completion
- Meaningful social relationships promote persistence by helping students feel comfortable in college and by providing them access to important information.

Promoting social relationships is particularly important for nontraditional students, who

Providing Alternate or Extended Access to Critical Academic Support Services

- Instead of forcing students to adapt to institutional policies and practices, alter some policies and practices around the students' needs in order to better ensure access to services vital to student success.
- Create a Virtual Student Center that serves as a one-stop-shop repository for students to gain 24-hour access to major-specific and department information; a forum for communicating with faculty; a portal for online academic tutoring; and a central hub for students to communicate about academics, transportation, careers, and a number of different topical areas.
- Directly support low-income student success by recognizing the time constraints these students often face with working part- or full-time; commuting to campus; and attending classes online, at night, or on the weekends.



Consolidation of institutional data, assessments, & research

Climate for Diversity

- Pell students are more likely to report hearing they heard faculty express negative/stereotypical views about their social class/economic background. There was not a significant difference with respect to hearing negative/stereotypical views about their social class/economic background from students.
- Pell students are more likely to report students of their own social-economic status, race/ethnicity, immigration background are disrespected on this campus
- Pell students are less likely to interact with people from an economic background other than their own.
- Pell students are less likely to feel pressure from members of their own racial/ethnic group to not socialize with other racial/ethnic groups

Economic Conditions

Pell students are more likely to:

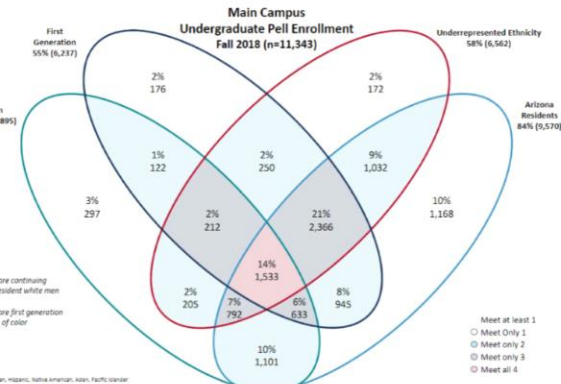
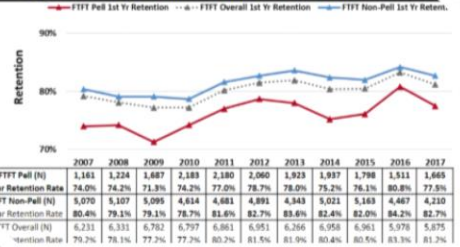
- Be employed as a student (Pell: 58% vs. Non-Pell: 43%)
- Work over 20 hours a week (Pell: 44% vs. Non-Pell: 30%).

Report their ability to attend/stay enrolled at the UA has been negatively affected because a lack of money

Table reports proportion of Pell students who participate in SSRI programs 2018 – 2019. The percentage of Undergraduate 2018-2019 Pell students was 36%.

SSRI Departments and Programs, Academic Year 2018-2019		
Program	Participants (n)	% Pell Recipients
SALT Center	753	7%
C.A.T.S. Academics	486	14%
THINK TANK – Overall	10,308	26%
THINK TANK – Tutoring (free visits)	3,952	27%
THINK TANK – Writing Center (free visits)	3,102	27%
THINK TANK – Supplemental Instruction	3,734	27%
Thrive Center - Overall	1,578	72%
Arizona Assurance	867	100%
Cultural Learning Communities	62	81%
First Cats	291	90%
Fostering Success	45	96%
PASS	610	35%
Thrive Guides	22	96%
Transfer Center	(Forthcoming)	57%

Pell Grant Status First Time Full-Time Retention and Graduation



Conduct Supplemental Analyses with Existing Data



Consolidation of
institutional data,
assessments, &
research

Factors Predicting Pell Recipient Freshman Retention | 2017 - 2018

Overview

A multivariate logistic regression analysis evaluated the predictors of the fall 2017 Pell recipient freshmen's (N=2,204) likelihood to retain to their sophomore year at University of Arizona. The fall 2017 new freshman cohort, including both full and part time, contained 7,360 students. Of those, 30.4% were Pell recipients. Pell recipient freshmen were retained to their sophomore year at a rate of 72.9%.

This analysis estimates the impact of Pell recipient freshman factors (Demographics, Academic Preparedness, First Year Living Situation, Academic Experiences, Summer Transition, Academic Support, Student Engagement, & Health & Wellness) on their likelihood of returning to sophomore year. Appendix A describes the proportion of Pell recipients that make up the student factors.

Results

Results are presented using odds ratios (OR) and statistical significance levels (See Table 1). A variable's odds ratio indicates the odds or likelihood of retention occurring given a particular program or service compared to retention occurring without that experience. Odds ratios are interpreted by magnitude in three main ways:

- OR < 1: Program or service indicates lower odds of retention occurring
- OR = 1: Program or service does not affect the odds of retention occurring
- OR > 1: Program or service indicates higher odds of retention occurring

Synthesis



Synthesis of
data,
assessment,
& research

- Thrive Center
- Inclusion and Multicultural Engagement
- ASEMS
- Enrollment Management
- Student Governance & Programs
- Campus Pantry
- Graduate Student
- Undergraduate student
- Student Engagement & Career Development
- Housing and Residential Life
- A-Center
- Financial Aid and Scholarships
- Assessment & Research

Inference Example

While **Pell students** are more likely to report they plan to complete their degree at UA, they **lag in retention and graduation rates** compared to their peers. **Out-of-state students** particularly **experience lower outcomes of persistence and graduation.**

- What characteristics of Pell students inform high expectations for academic achievement and completion?
- What factors have been most helpful and impactful for Pell student success? Why?
- What factors led Pell students to continue at UA if they strongly considered taking a break or withdrawing?
- Why do out-of-state students experience lower levels of persistence and completion rates?



Draw
inferences

Focus Group



Conduct
focus groups

- Two focus groups:
 - Six In-State Junior & Seniors
 - Six Out-of-State Pell Junior and Seniors
- Eligible population list by assessment office
- All students received a \$20 gift card to Student Union
- Sent email initiations 3-weeks before with reminders
- Eventbrite RSVP system for 14 max (increase next time)
- Thursday at 3:45 – 5:00pm in Student Union
- One facilitator with 1-2 note-takers
- Recorders
- Had a backup space available if needed
- Sign in sheet with demographics



Question Examples



Conduct
focus groups

Sense of Belonging

What helps you feel connected to the University of Arizona community and what about them made you feel more connected?

Academic Support

Who did you receive the most support from throughout your undergraduate experience that contributed to your academic success at UA?

What did that support look like for you?

What campus services did you use that were most helpful towards your academic success?

Data-informed Insight

INSIGHT

Invest in cultural centers and resources and other culturally relevant programs and services that support Pell-recipient freshman retention.

- Pell students inhabit multiple different academic and social identities.
- Pell students are more likely to become involved in at least one or more cultural/resource center, join a cultural identity-based fraternity or sorority, and join an organization promoting cultural diversity.
- Pell recipient freshmen in Cultural Learning Communities were 2.67x more likely than non-participants to retain to their sophomore year.

Quant Data

Focus Groups

Focus groups amplified the existing results that connections to cultural and resource centers were critical to students and their success at UArizona. They helped students:

- Feeling connected to the university community, for some after not connecting with students in Greek Life, academic programs, or with peer students
- Discover jobs, learn about other resources, and use free services (printing, coffee)
- Especially helpful in freshman year
- *"Going to the cultural centers for me is awesome...because before that I was ready to leave this campus." – Out of state student*
- *"I'm in the Arizona science and engineering math Scholars Program and it's very focused on diversity and bringing people into STEM fields that are from minorities backgrounds, so it's also having spaces like where I can see myself represented by other students." – out of state student*
- *"I get most of my support from AASA and mostly from the cultural centers." – out of state student*



Develop
insights

Know your Audience

100 total slides with 15 “Core” used to tailor insights



Share & take
action on data-
informed Insights

For each audience:

- Be mindful of data literacy
- Apply data visualization principles
- What context is needed?
- How do they like to receive information?
- Interpret and bridge to practice and policy, when appropriate
- Closing “What action items will you help facilitate?”

Audiences



Share & take
action on data-
informed Insights

- Enrollment Management
- Retention Working Group
- Student Success and Retention Innovation Leadership
- Hispanic Serving Institution Initiatives
- Dean of Students Office
- Diversity and Inclusion
- Retention Working Group
- Academic Advisers
- Student Retention & Completion Specialists
- Student governing boards
- Faculty Senate
- Senior Leadership Team (President, Provost, AVPs)

Key Insights



Share & take
action on data-
informed Insights



Assessment & Research

Pell Grant Student Experiences and Success: Key Insights

Through a collaborative year-long process, the [Student Data Insights Strategy Team](#) collected and synthesized multiple sources of data to better understand the University of Arizona Pell student journey. Data-informed insights are presented with recommendations to inform the development of policy, practices, and services that enhance the student experience and their success. This effort produced over 40 data-informed insights on Pell undergraduates across multiple domains. Top-level insights are described in the present summary. For more information on methodology, data-informed insights, and to schedule a presentation to discuss the insights further contact AssessmentResearch@email.arizona.edu.

Retention and Completion

- Pell students continue to excel in their undergraduate experience; Build on these successes
- In-state and out-of-state Pell recipients have distinctive experiences and outcomes; Retention and completion strategies should reflect these
- Achieve marginal retention gains through realignment of first year support services for out of state Pell students

Policies and Administrative Processes

- Further review and streamline past due balance holds, fees, financial aid disbursement, and course registration policies to support student success
- Provide personalized communication and support through financial aid verification and other administrative processes
- Review policy and process on refund request to support student financial wellness and likelihood to return
- Continue to grow and refine Inclusive Access; Leverage textbook timely and actionable data

Student Support Services

- Build capacity in programs that effect Pell freshman first year retention
- Based on impactful practices, scale holistic support to offer a Pell Pledge Support Bundle
- Invest in cultural/resource centers and culturally relevant program and services
- Increase efforts to provide accessible, nutritious, and affordable food
- Communicate personalized, timely, and relevant campus information
- Intentionally leverage student employment opportunities to support Pell recipient student success

Financial Wellness

- Pre-college financial literacy was a main factor that drove student decision making (enrollment, financial aid, living on campus)
- Develop a pre-college financial fit communication plan and financial wellness support throughout matriculation
- Housing costs were viewed as too expensive and compared to off-campus options; provide support for alternatives or reduced-price on-campus housing options

Post-Graduation

- Invest in graduate school preparation

Actions Taken

- Pell Pledge Bundle
- Updated or revised late-fee policies
- Review of institutional hold policies due to past-due balance
- Inform the Basic Needs Coalition, helped secure ~200k grant funds that will build out a student basic needs infrastructure
- Expansion of financial wellness and literacy efforts
- Enhanced efforts on access to internships and undergraduate experiences for lower-income students
- Increased monitoring of out-of-state Pell student access to programs and services



Share & take
action on data-
informed Insights

Data-Informed Insight Examples



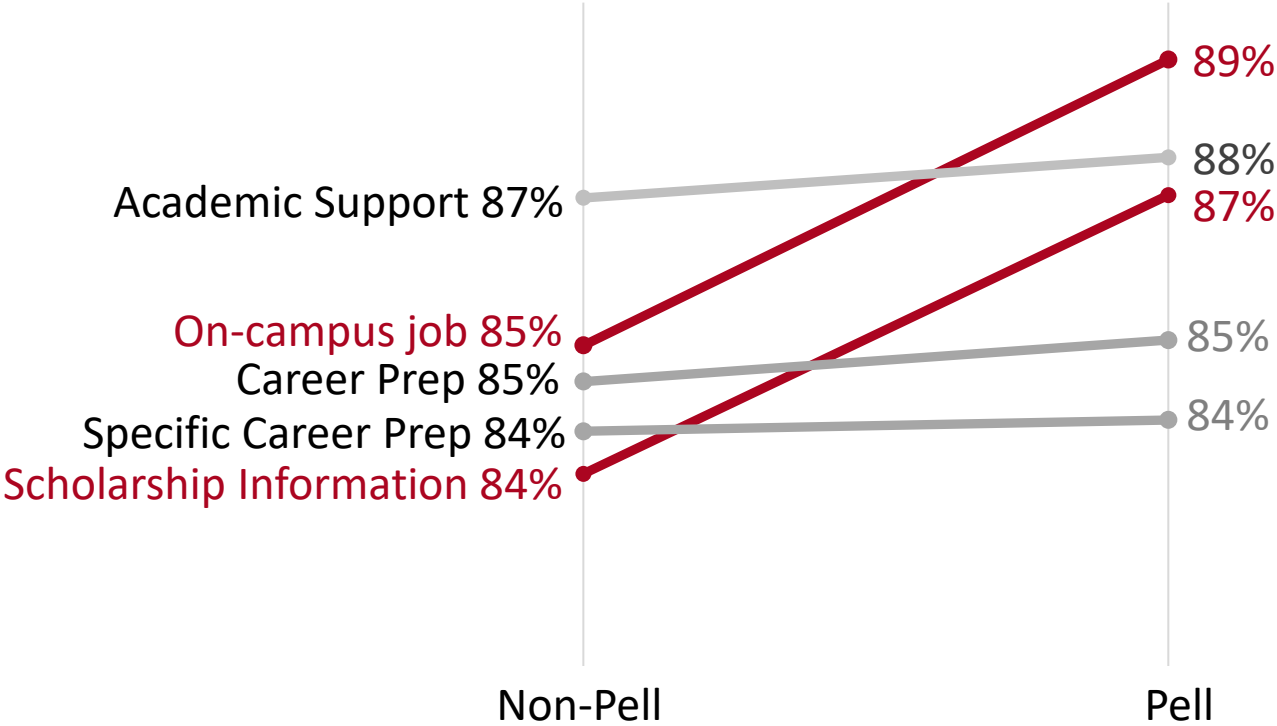


Invest in on-campus jobs, scholarship information,
free legal services, and social justice programming



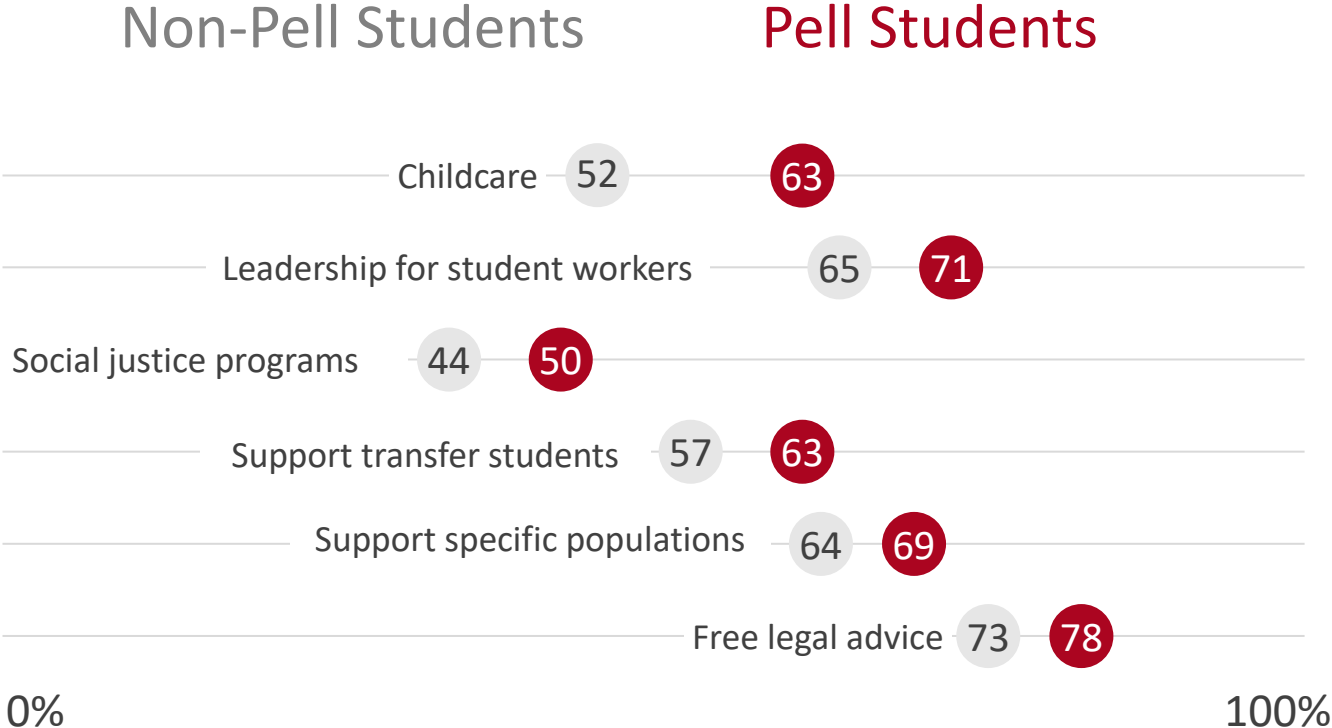
Results

Top 5 Student Service Priorities



Results

Support for Student Services Priorities: Differences by Pell





Scale holistic support to offer a Pell
Pledge Support Bundle



Results

Understanding the holistic student:
Pell recipient first year factors influencing retention



Results

Multivariate Logistic Regression: Pell Recipient Retention 2018-2019 (N=1,820)

Pell recipients are significantly more likely to retain when they are involved in the following (after holding for other factors):

Think Tank Supplemental Instruction (3+ visits): 2.06 more likely to retain

Think Tank Content Tutoring (3+ visits): 1.86x more likely to retain

Fraternity or Sorority: 1.80x more likely to retain

Campus Recreation: 1.05x more likely to retain for each additional week

Need-based Aid: 1.72x more likely to retain



Results

Financial
Support



+

Engagement



+

Academic
Support



=

Maximized
Retention



Focus Group themes also indicate multiple sources of support, when asked:

Academic Support

"[Thrive Center] makes it feel like a home and easing into college life coming from a first-generation background"

Sociocultural Connections


"I'm part of a fraternity, a multicultural one, and was in a leadership position for a club for minorities in pre-med."




Actions

The **Pell Pledge Support Bundle** would be included with the financial aid award letter, combining financial, engagement, and academic support from the very beginning.

Pell Pledge Support Bundle :

- Guaranteed spot in a ranked or self-selected first-year support program (CLCs, First Cats, ASEMS, Blue Chip, etc.)
 - Strategic invitation and involvement in free Think Tank and Campus Recreation programs
 - Information and personalized invitation to cultural and resource centers
- 

Lessons Learned

- Centralized coordinating unit who has trust and understanding of departments
 - Qualitative focus group data were critical
 - Taking a more holistic approach was important to the process and insights developed
 - Students and professionals provide valuable perspectives and context
 - Diverse professional experiences from different functional areas
 - Incorporate classroom learning data and assessments
 - Takes 1-3 hours a week for team member engagement, need to ensure supervisors support this time commitment
 - Build out a “Student Data Network”
- 

Student Data Network

- Department and institutional leadership responsible for managing and using student data to connect data point across campus and increase utility of data use that informs decisions to improve student experiences and success outcomes.



- 30+ Members
 - Institutional Research (co-lead)
 - Office of Instruction and Assessment
 - Enrollment Management
 - Student Affairs
 - Academic Support Services
 - Faculty Senate
 - Diversity and Inclusion
 - Libraries
 - Arizona Online / Distance Education

Adapted Model to Address COVID-19 Disruptions



Assessment & Research

Fall 2020 Student Experiences, Needs, & Perceptions Student Data Insights Strategy Team

Purpose

The [Student Data Insights Strategy Team](#) examines UA student reentry and progression through Fall 2020 within the context of hybrid and remote classroom learning, student services, behaviors that reduce COVID-19 transmission, and COVID-19 related disruptions. An institutional team of students, staff, and faculty representatives will work across departments to coordinate and implement a strategy that will deliver data-informed, actionable recommendations that will support the health, experiences, and success of Arizona students.

Do you have questions about Fall 2020 student experiences, needs, and perceptions? Contact AssessmentResearch@arizona.edu

Objectives

- Serve as an information resource hub to answer inquiries, make connections to existing insights, identify information needs, and collaborate with those seeking to conduct assessments
- Deliver timely and tailored, data-informed recommendations to leadership and department staff best positioned to enact change on policies and practices
- Conduct equity-minded analyses and tailor data-informed recommendations that account for differing student experiences and needs

Rationale


A multi-department and constituent team leverages members' knowledge bases, perspectives, and access to data sources. This approach will support the following:

- **Quality and usefulness of information:** The team will be able to work across administrative systems, conduct creative and well-designed assessments, triangulate data, and frame insights within appropriate context to improve produced information and recommendations.
- **Timeliness and responsiveness:** A proactive and agile strategy will allow for the sharing of insights in timely and responsive ways to ensure relevancy and increase usefulness in a quickly changing environment.
- **Use of existing data:** A coordinated effort will maximize the use of existing data through follow-up analyses and sharing information with others to reduce duplication of efforts.
- **Decrease survey fatigue:** A collaborative and centralized coordination will reduce the likelihood of students being asked to respond to multiple surveys at the same time and on the same topic, thereby adding to already prevalent survey fatigue.

Members

- Ah Ra Cho – Director of Program Evaluation and Student Assessment, College of Medicine
- Alex Robie – Project Director, Office of University Initiatives
- Amanda Reyes – Writer and Content Manager
- Anthony Clarke – UA BookStores Business Manager
- Becky Pérez – Assistant Director of Instructional Data, Office of Instruction and Assessment
- Brad Hensely – Analyst for Retention & Completion, Advising Resource Center
- Carsen Kipley – Assistant Director, Accommodation Services
- Damien Snook – Manager, Enrollment Analytics,
- Danielle Flink – Student Success and Retention Specialist, College of Agriculture and Life Sciences
- David Miller – Director of Content Strategy & Communications
- Diane Ohala – Associate Professor of Linguistics and Chair Faculty Senate Student Affairs Policy Committee
- Jen Ludwig – Sr. Associate Director, Operations & Management, Student Success & Retention Innovation
- Kadian McIntosh – Director of Research & Analytics, College of Medicine
- Kendra Thompson-Dyck – Sr. Analyst, Assessment & Research
- Laura Andrews – Sr. Analyst, Assessment & Research, Student Success and Retention Innovation
- Lara Miller – Analytics & Assessment Librarian, University Libraries
- Lauren Pring – Evaluation Specialist, Campus Health
- Lin Zhang – Coordinator of Assessment & Research, Dean of Students Office
- Linda Scheu – Senior Associate Director, Assessment and Analytics
- Lucas Schalewski – Director of Assessment and Research
- Mari John – Assistant Director Student Union Memorial Center
- Marvin Slepian – Regents Professor, College of Engineering and College of Medicine
- Megan Forecki – Sr. Coordinator of Assessment & Research, Student Engagement & Career Development
- Peggy Glider – Coordinator of Evaluation and Research, Campus Health
- Sarah Kyte – Sr. Research Scientist, Student Success and Retention Innovation

Questions to consider when applying this model on your campus

- What timely and relevant student experiences or outcomes need to be addressed?
 - What type of data are going to be informative?
 - Who has access to these data?
 - What type of supplemental data collection and analyses will be needed?
 - Who should be involved through the process?
 - Who are the stakeholders?
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Thank you!

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Consolidation of institutional data, assessments, & research



Synthesis of data & research



Draw inferences



Conduct focus groups



Develop insights



Share & take action on data-informed Insights



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