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Asset-minded Overview of Student Diversity

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Agenda

Asset-minded Overview of Student Diversity

- Overview of Diversity Data
- Applying an Asset-minded Perspective
- Impact within Learning Environment
- Q&A

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Overview of Diversity Data

Diversity data on your campus

- Where are your data?
  - Visualization platform (Tableau, Power BI)
  - Fact book, IR website

- Are the data readily available to decision makers?
  - Do those who need access have access?

- Who are your data partners?
  - Institutional research
  - Office of diversity, equity, and inclusion
  - Academic Affairs
  - Student Affairs

Diversity of UM Students

Tableau...

Student demographic data are available via Tableau

- Diversity and Inclusion Workbook developed by IREP in collaboration with diversity liaisons
- Selection criteria allow for greater specificity
- Training and consultation to help navigate Tableau

Census Selection	IHL Ethnicity	IPEDS Ethnicity	Gender	Residency	Program Priority	Program Type
Official Census	All	All	All	All	Primary Program	Undergraduate

Initial Census: Aligns with the University's official last day to register or add classes (same criteria as used in prior years), Use internally for operational decisions. Official Census: Aligns with the IHL-mandated census date (Nov 1/ Apr1). Use for regulatory reporting and for external requests. For more information see "New Census Postface".

Liberal Arts Student Enrollment, Fall 2020-2021 by Ethnicity (IPEDS), Gender

	Female	Male
	UM	UM
	UM	UM
White	76.06% (6,721)	78.87% (5,292)
Black or African American	13.94% (1,232)	9.75% (654)
Hispanic or Latino	4.26% (376)	3.83% (257)
Two or More Races	2.34% (207)	2.34% (157)
Asian	2.00% (177)	2.31% (155)
Non-Resident Alien	0.94% (83)	2.30% (154)
American Indian or Alaskan Native	0.26% (23)	0.27% (18)
Unknown	0.16% (14)	0.24% (16)
Native Hawaiian, Other Pacific Islander	0.03% (3)	0.10% (7)

Go To Freshman Cohort Data

Go To Faculty/Staff Data

Go To Printable Dashboard

Department
Liberal Arts

Data to View:
- ○ Degrees Conferred
- ◉ Student Enrollment
- ○ Student Overall GPA

Split Rows By:
- ○ Ethnicity (IHL)
- ◉ Ethnicity (IPEDS)
- ○ Gender

Split Columns By:
- ○ Overall
- ◉ Gender
- ○ Minority Status (IHL)

Academic Year
- ○ 2012-2013
- ○ 2013-2014
- ○ 2014-2015

Show Data at What Level?
- ☐ Program
- ☐ Department
- ☐ School

Color Scheme
UM Color Palette

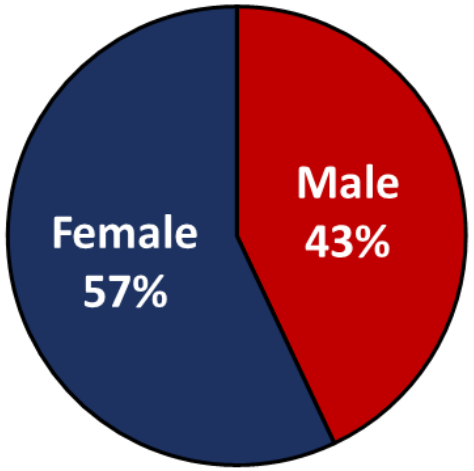
Include Counts in Labels?
Label With Counts and Percentages

Examining your data

- What data are readily available?
- What data are available with some effort?
- What do we ***need*** for decision making?
- What do we ***want*** to have?
- Disaggregating your data

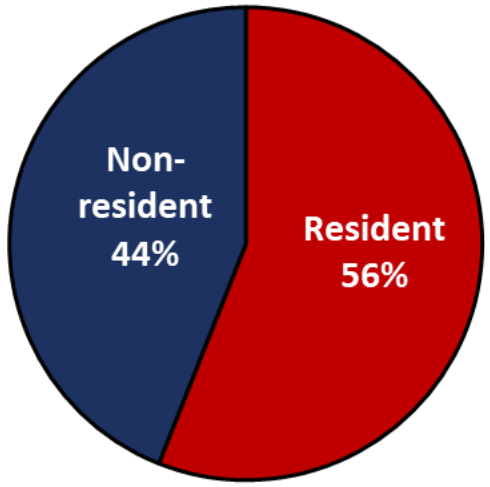
Diversity of UM Students

Binary gender is used in reporting, non-binary data are not collected/ reported systematically



UM Fall 2020 Enrollment by Gender

Residency is readily available



UM Fall 2020 Enrollment by Residency

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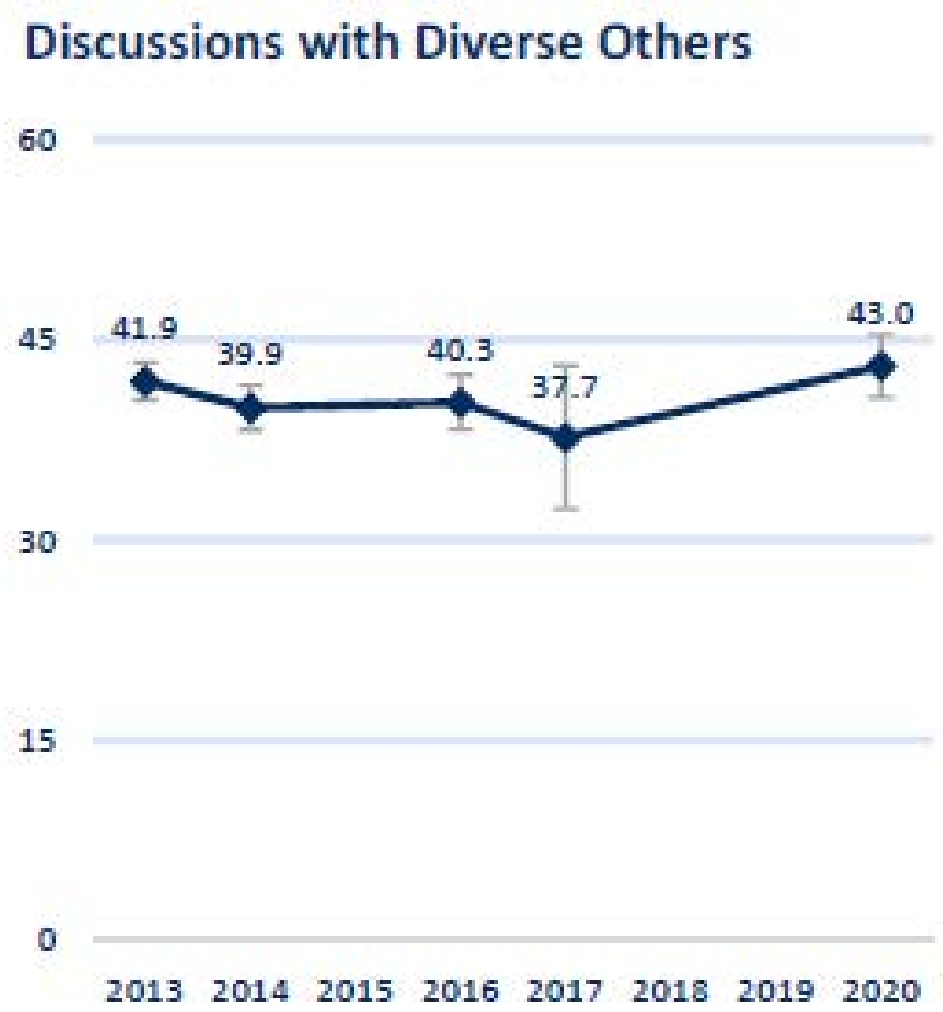
A second look your data

- Need a shared understanding of campus populations
  - How are terms, descriptors used
- Where are your data “strengths” and “opportunities”
  - Campus data governance may help gain strengths
  - Task force or committees to advance data collection
- Do not overlook outcome data, institutional data

Diversity data

- Other data about students' lived experiences is available from surveys such as the National Survey of Student Engagement (NSSE)
- Campus Climate Study



Mean score among first first-year students

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An Asset Based Perspective

Why an asset mindset matters

- How we understand and identify problems affects the questions we ask.
- The questions we ask affect the answers we will get.
- Having an **anti-deficit** mindset when relating to community members (students, colleagues (from different demographic backgrounds/areas of study), community members outside the institution, etc.) helps us to ask the right questions and engage effectively in work that promotes equity.
- Equity-minded work builds capacity for equity-minded work.

NEWS

Federal Panel Seeks Cause of Minority Students' Poor Science Performance

By *Peter Schmidt* | SEPTEMBER 15, 2008

- Why do so few pursue STEM degrees?
- Why are they so underprepared for college-level math and science courses?
- Why are their grades and other indicators of academic achievement disproportionately lower than those of their White and Asian American counterparts?
- Why do so many change their majors to non-STEM fields?
- Why do so few continue on to graduate degree programs in STEM?

What do these questions tell us about the minoritized students who ***are*** successful*?*

An Anti-Deficit Achievement Framework for Research on Students of Color in STEM

Shaun R. Harper

- Analyzed data from the National Black Male College Achievement Study
- NBMCAS included data from: Public research universities, highly selective private research universities, private & public historically Black colleges and universities, liberal arts colleges, and comprehensive state universities
- N = 219 Black males at 42 different colleges

How do we ask ***better*** questions?

In Pursuit of Better Questions

Cultural capital and social capital theories (Bourdieu, 1986, 1987):

- Deficit: Enumerate barriers to success like: lack prior exposure to high-level science instruction, cutting-edge technologies, sophisticated lab equipment, and insider knowledge shared among family members who have taken college-level STEM courses
- Asset-Minded: Elucidate how minority students from lower-income and working-class backgrounds, cultivate meaningful and value-added relationships with STEM faculty and professionally well-connected others in their fields.

Critical race theory (Harper, 2009; Solórzano and Yosso, 2002; Yosso, 2005):

- Deficit: Relying on deficit-laden reinforcements of minority student underachievement from the education and social science literature.
- Anti-deficit: Recognizes students of color as experts on their experiential realities and empowers them to offer counternarratives concerning their success in STEM fields

In Pursuit of Better Questions

Stereotype threat theory (Steele, 1997; Steele and Aronson, 1995):

- Deficit: Asks questions that further examine how racist stereotypes have a negative effect on minority student performance in STEM courses
- Anti-deficit: Asks questions that provide insights into strategies these students employ to resist the internalization of discouraging misconceptions and respond productively to stereotypes they encounter on campus.

Self-efficacy theory (Bandura, 1997):

- Deficit: Routinely asking why some students of color struggle to perform well in college-level science and math.
- Anti-deficit: Seeks to understand how achievers develop science identities, how their confidence in specific science- and math related tasks is developed, and how recognition of competence in certain tasks leads to various forms of achievement in others.

In Pursuit of Better Questions

Attribution theory (Weiner, 1985):

- Deficit: Continually having participants identify all the barriers to persistence and success.
- Anti-deficit: Having minority STEM achievers to name the persons, resources, experiences, and opportunities to which they attribute their achievements.

Campus ecology theories (Moos, 1986; Strange and Banning, 2001):

- Deficit: Repeatedly documenting how few minority persons are in STEM.
- Anti-deficit: Explain how a student of color who is one of few non-White persons in her or his major manages to thrive and negotiate environments that are culturally foreign, unresponsive, politically complex, and overwhelmingly White.

In Pursuit of Better Questions

Theories on college student retention (Swail, Redd, and Perna, 2003; Tinto, 1993):

- Deficit: concentrating on the social, academic and cognitive, financial, and institutional barriers to persistence.
- Anti-deficit: Exploring the undercurrents of retention in STEM and factors that keep students of color enrolled through degree attainment.

Possible selves theory (Markus and Nurius, 1986; Oyserman, Grant, and Ager, 1995):

- Deficit: Surveying those who dropped out the STEM pipeline to find out more about why they left.
- Anti-deficit: Takes account of which experiences afford STEM persisters opportunities to envision themselves in future long-term careers as chemists, mechanical engineers, math professors, and so on.

Better Questions

Table 6.3. Sample Reframed Research Questions Explored in the NBMCAS

Deficit-Oriented Questions	*Anti-Deficit Reframing*
Why do so few Black male students enroll in college?	How were college aspirations cultivated among Black male undergraduates who are currently enrolled?
Why are Black male undergraduates so disengaged in campus leadership positions and out-of-class activities?	What compelled Black male students to pursue leadership and engagement opportunities on their campuses?
Why are Black male students' rates of persistence and degree attainment lowest among both sexes and all racial/ethnic groups in higher education?	How did Black men manage to persist and earn their degrees, despite transition issues, racist stereotypes, academic underpreparedness, and other negative forces?
Why are Black male students' grade point averages often the lowest among both sexes and all racial/ethnic groups on many campuses?	What resources proved most effective in helping Black male achievers earn GPAs above 3.0 in a variety of majors, including STEM fields?
Why are Black men's relationships with faculty and administrators so weak?	How did Black men go about cultivating meaningful, value-added relationships with key institutional agents?

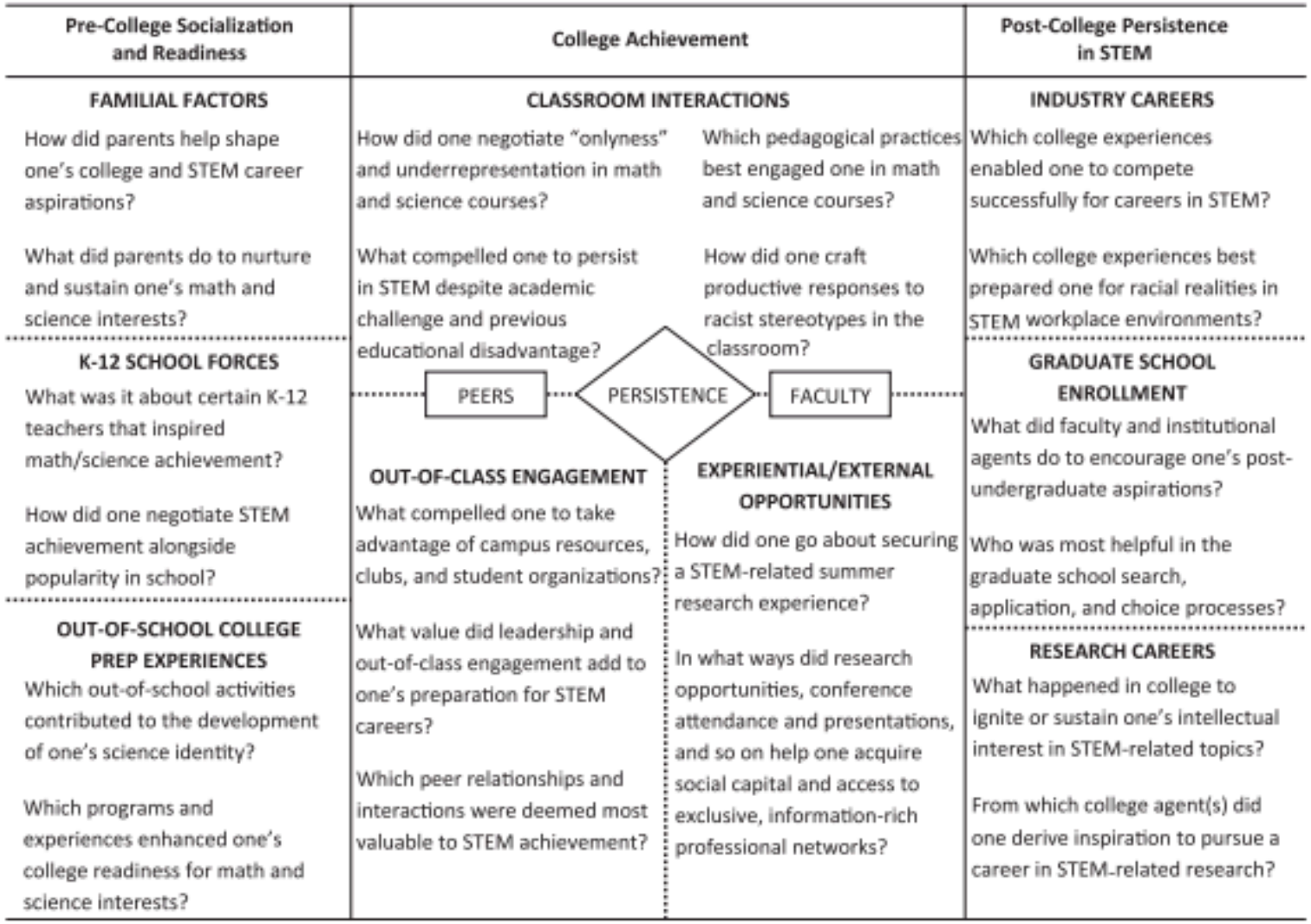
Better Questions

Table 6.4. Sample Reframed Research Questions for Students of Color in STEM

Deficit-Oriented Questions	*Anti-Deficit Reframing*
Why do so few pursue STEM majors?	What stimulates and sustains students' interest in attaining degrees in STEM fields?
Why are they so underprepared for college-level mathematics and science courses?	How do STEM achievers from low-resource high schools transcend academic underpreparedness and previous educational disadvantage?
Why are their grades and other indicators of academic achievement disproportionately lower than those of their White and Asian American counterparts?	What enables students of color in STEM to make the dean's list, compete for prestigious fellowships and research opportunities, and earn high GPAs?
Why do so many change their majors to non-STEM fields?	What compels students of color to persist in STEM fields, despite academic challenge and the underrepresentation of same-race peers and faculty?
Why do so few continue on to graduate degree programs in STEM?	What are common aspects of students' pathways from high school completion through doctoral degree attainment in STEM fields?

A Framework for Better Questions

Figure 6.1. Anti-Deficit Achievement Framework for Studying Students of Color in STEM



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Impact within Learning Environment

Compelling Government Interest

Regents of the University of California v. Bakke, 1978

- While the court's decision limited the use of racial quotas, both the majority opinion and dissent affirmed the value of racial diversity in educational environments.
- This compelling interest has continued to be affirmed over several supreme court decisions, most recently Fisher v. Texas (2016).
- Research has continued to support the positive benefits of diversity

Impact within Learning Environment

Student Diversity

- Students value teaching that recognizes their individual academic and social identities and that addresses their particular learning needs and interests. (Hockings, et al., 2010)

- The development of a student's competence, self-efficacy, sense of autonomy, and connections to faculty, staff, and peers are associated with lifelong well-being, high performance, and deep learning (Deci & Ryan, 2008).

- Increased engagement with diverse peers in the classroom is connected to increased intellectual ability, social ability, and civic interests (Haslerig, et al., 2013)

Unlocking These Benefits

The Diversity Bonus

Superadditivity

2 + 2 = 5

The more complex the task or problem,
the greater the benefit of diversity

Unlocking the Benefits

Strategies

- Curricular Content
- Student Engagement (peer & content)
- Engaged-learning

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Moving to Action

Campus Partners and Data

- Workshops helped us provide better data visualization
- Instructor questions helped us provide better data
- Working examples helped us to answer questions

Making the MOST of an Asset-Minded perspective

- *Mississippi Outreach to Scholastic Talent (MOST) and attribution theory*
  - Deficit: Continually having participants identify all the barriers to persistence and success.
  - Anti-deficit: Having minority achievers to connect future students to the persons, resources, experiences, and opportunities to which they attribute their achievements.
- *Men of Excellence (MOX) and possible selves*
  - Deficit: Surveying those who dropped out of the pipeline to find out more about why they left.
  - Anti-deficit: Takes account of which experiences afford persisters opportunities to envision themselves in future long-term careers.

Teaching and Learning

Consider Asset-minded Attribution Theory in Gateway Courses:

- Examine relationship between instructor of record and student success outcomes (immediate and long-term)
- Examine the pedagogy, course material, and other teaching practices that is generating student success and connection.

Improve DFW rates through pedagogy

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Q & A

Follow up with us

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