Choosing Data that Tells a Holistic Story about Student Success

Tina Colvin, Ph.D.
Anthology at the University of Idaho
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After participating in this session, you will be able to...

- **Identify** and **define** common metrics used to determine student success

- **Describe** common factors that influence student success

- **Identify** Anthology datasets that can be used to tell stories on these metrics
Data-Informed Stories about Student Success

First, with our review of definitions and metrics, we’ll ask:

How is student success commonly defined? What counts as student success for U of I?

Then, with our discussion of student success factors, we’ll ask:

What contributes to the success of a student, considered as a whole person?

Finally, given what we’ve learned about how the institution defines student success and what impacts the retention, completion, persistence, and post-grad success of students, we’ll ask:

How can we use data to tell a story about our work in Colleges, Departments, and classrooms and their relationship to student success?
How is student success commonly defined? What counts as student success for U of I?
How is student success commonly **defined and measured?**

<table>
<thead>
<tr>
<th><strong>Retention Rates</strong>*</th>
<th>This measures the rate of return among students from year to year.</th>
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<tbody>
<tr>
<td><strong>Graduation Rates</strong></td>
<td>Closely related to retention rates are graduation rates. This is the number of students enrolled in an institution who sought and achieved a degree.</td>
</tr>
<tr>
<td><strong>Completion</strong>*</td>
<td>Refers to students who finish their degree within six years after entering postsecondary education for the first time. This metric is particularly applicable to institutions with student populations that may enter with goals that do not depend on graduation.</td>
</tr>
<tr>
<td><strong>Academic Performance</strong></td>
<td>Academic performance refers to metrics that measure and track academic progress and achievement. These include GPA, rank-in-class, or first-year performance in core subjects.</td>
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*U of I Priority*
How is student success commonly **defined and measured?**

<table>
<thead>
<tr>
<th><strong>Post-Graduation Success</strong>*</th>
<th>Often related to employment, the metrics used to evaluate post-graduation success often include employment rates and salaries.</th>
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<tbody>
<tr>
<td><strong>Persistence</strong>*</td>
<td>While it varies in definition across institutions, this term generally captures student progress from one benchmark to the next, e.g., a student who enrolls in fall and persists to spring semester.</td>
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<tr>
<td><strong>Educational Goals</strong></td>
<td>Many two-year institutions, for example, have been placing increasing importance on students’ educational goals rather than more common metrics such as retention rates.</td>
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How does the University of Idaho define student success?

**EDUCATIONAL EXPERIENCES THAT IMPROVE LIVES**

**Objective A:**
Provide greater access to educational opportunities to meet the evolving needs of society.
Indicators: Total number of enrolled students and conferred degrees (both undergraduate and graduate).

**Objective B:**
Foster educational excellence via curricular innovation and evolution.
Indicators: Increased retention, numbers of graduates, National Survey on Student Engagement High-Impact Practices score and reductions in remediation via curricular innovation.

**Objective C:**
Create an inclusive learning environment that encourages students to take an active role in their student experience.
Indicators: Measures educational parity and retention rates (for new and for transfer students).

Source: 2020-2021 University of Idaho Revised Strategic Plan
If your work includes touch points with students, then you have an opportunity to generate data of value to your institution. I see this clearly when reflecting on my experiences coordinating academic success programs and tracking student usage of our services [...] I asked students to sign into SI [Supplemental Instruction] sessions on paper, and then I compared their midterm and final course grades against their peers who did not attend SI sessions. What I didn’t realize at the time was that I was generating data points. The potential value of this data was vast – not only for grasping the efficacy of academic intervention efforts, but also for slicing in any multitude of ways, all in alignment with institutional strategic initiatives, while still taking appropriate efforts to protect student anonymity [...]

Matt Jackson, Ed.D.
Anthology

Source: Student Success as a Measure of Effectiveness | Anthology
Key Questions toward **Data-Informed Student Success Stories**

**What data do you have** about your College? About your Department? About your courses? What data exists on your campus that is not currently being leveraged?

**What data do you need** in order to tell the story that you want about retention, persistence, completion, post-grad success, and beyond, i.e., the mission, vision, and values of your unit?

**What data can you reasonably generate**? What needs to happen (data collection processes, stakeholder buy-in, etc.) before you start generating that data?
What contributes to the success of a student, considered as a whole person?
I’ve never met a student who said to me: ‘Doc, I’m striving each day to fail, to learn how to quit, to be unsuccessful.’ Every student wants to succeed, but unfortunately far too many enroll without the academic preparation required to succeed or they enroll and struggle to access the resources, information, and advice that enables their success at our institutions.

Terrell L. Strayhorn, Ph.D. in a Keynote Address to the National Academic Advising Association (NACADA)

Source: “Reframing Academic Advising for Student Success: From Advisor to Cultural Navigator”
Variables that Affect Student Success

- Engagement in the classroom
- Meaningful involvement in co-curricular activities
- Clarity around educational goals and students’ progress toward them
- Well-being and sense of belonging
- Non-cognitive skills (resiliency, motivation, confidence)
- Use of campus resources

Student success
**Targeted Variables** that Affect Student Success, or “What Data Can you Reasonably Generate?”

- Engagement in the classroom
- Well-being and sense of belonging

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**Student success**
Targeted Variables that Affect Student Success, or “What Data Can you Reasonably Generate?”

Engagement in the classroom

Well-being and sense of belonging

Objective C:
Create an inclusive learning environment that encourages students to take an active role in their student experience.
Indicators: Measures educational parity and retention rates (for new and for transfer students).
How can we use data to tell stories about our work in Colleges, Departments, and classrooms and their relationship to student success?
According to Anthology research, “few institutions ask experience questions related to diversity, equity, inclusion, and belonging, and the largest source of these questions comes at the faculty level. **Institutions should be asking DEIB experience questions at broader levels to collect student perceptions and feedback on commitments to DEIB.** The data generated by asking about these experiences not only in the classroom but at the institutional level **can provide an opportunity to understand how well an institution is providing DEIB across departments, programs, courses, and faculty.** The inclusion of DEIB experience questions lets students know that commitments to diversity, equity, inclusion, and belonging are an important piece of the academic experience.
Data Storytelling and Continuous Improvement

Continuous Improvement Framework

PLAN

What data do you need, and how will you get it?

DO

Collect data

CHECK

Analyze the results

ACT

Use data to inform your decisions and stories

Use data to inform your decisions and stories
Data on Belonging: First, **Define your Terms and Approach (Plan)**

According to Strayhorn (2012), **belongingness** relates to “students’ perceived social support on campus, a feeling or sensation of connectedness, the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the group (e.g. campus community) or others on campus (e.g. faculty, peers).”

Strayhorn further emphasizes that, “**students who do not feel like they belong rarely stay in college.**”

Data on Belonging: Second, Ask Questions (Do)

1. The instructor appreciated diversity and modeled that appreciation.
2. The instructor was open and comfortable with diversity.
3. The instructor structured learning experiences for valuing diversity.
4. The instructor created an anti-bias and anti-racist learning environment.
5. The instructor valued the diversity of life experiences among students.
6. The instructor maintained dignity and respect when interacting with the students.
7. The instructor created an equitable and respectful environment in the classroom for all students.
8. The instructor modeled respect for human dignity.
9. Rank the safety, acceptance, and security of your group experience:
10. Describe how the instructor created an anti-bias and anti-racist learning environment:
Data on Belonging: Third, **Analyze Where you Are (Check)**

What are students saying about *how coursework and instructor engagement* in your college, department, or *program provides them a sense of belonging*?

**CURRENT STATE**
You need to know where you are...

**GOAL SETTING**
... to set goals about where you want to be.
Data on Belonging: Fourth, Review, Communicate, and Communicate Some More (Act)

Who needs to know that belonging is a priority for your unit?

Who needs to know that you are performing this audit?

Who needs to know that you are going to take action? And, later, how you are going to take action?

Who needs to know why belonging, this audit, this action, is important?

Always: consider your audience.
What does the joy of learning lead to? It leads to persistence in a task, to mastery of skills, to ethical grounding, to a willingness to work with others who are different from us, to critical and creative thinking, and to the engagement with learning that matters most to students and to faculty. Moreover, it is this kind of student experience that leads to retention, and thus to better graduation rates. However, it is important to emphasize that using graduation rates as the goal of our efforts at student success gets the equation wrong. Rather than graduation rates being a sign of student success, student success, in the form of a successful student learning experience, should be a strategy for improved graduation rates.

Academic Senate of the California State University (ASCSU), the “official voice of the faculty” at CSU

Source: ASCSU White Paper on Student Success (calstate.edu)