Creating a Powerful Pipeline Tool to Inform Campus Planning

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You may be interested in this session, if...

- You often find yourself having to explain student persistence to administrators who are unfamiliar with retention and graduation rates.
- This was best session during this timeslot.
- You need a simple, visual way of showing retention and graduation data to diverse audiences.
Issues for Institutional Researchers

- Useful in presenting retention and graduation rates, as the Powerful Pipeline Tool captures where non-returning students have gone.
- Administrators can quickly see when non-returning students are being lost from the institution, indicating areas for programmatic opportunities.
- The pipeline follows the enrollment patterns of first-time, full-time freshmen through a six-year period to graduation.
By the End of this Presentation ...

... We Will Have Discussed:

- Motivation for Creation of Pipeline
- Brief Literature Review
- Research Questions
- Variables Used
- Detailed Steps for Creating a Pipeline
- Results & Limitations
- Possible Implications
- Questions & Comments
Motivation for the Study

- Campus stakeholders can see at a glance:
  - how many students are leaving?
  - where they are going?
  - where to target efforts to increase retention and graduation?
- Create opportunities to focus campus resources to improve programs and services which will potentially increase retention and graduation rates
Motivation for the Study (cont.)

- While institutions continue to provide additional and improved programming to increase retention, little is known about an individual institution’s non-returning students.

- Since it is more cost effective to retain current students, institutions become empowered to increase retention and graduation rates when more is known about reasons that students stay, students leave, and where leavers go.

- With this type of information, institutions will have important information to make relevant and important changes that could translate into increased retention rates.
Brief Literature Review

- Students that remain at the institution early on in their academic career are likely to be engaged with the institution (Tinto, 1993), while those that leave may do so because of a variety of economic/financial reasons (Braxton & Hirschy, 2005), to seek an institution that more appropriately matches their academic ability and interests, or their social needs and interests (Bean, 1990).

- Thus, a Powerful Pipeline Tool creates opportunities for meaningful conversations about institutional efforts that contribute toward retention and graduation rates to identify realistic solutions.
Research Questions

- At what point in the educational pipeline are institutions losing students?
- Where are students going?
- How can institutions reduce the number of students leaving the institution?
- Impetus – desire to improve graduation and retention rates
  - Pipeline is a tool to use when talking to faculty and administrators which makes the data less intimidating (absence of glazed looks on faces)
Variables Used

- Enrollment by level
- Retention rates
- Graduation rates
- Non-returning student data
- Transfer data

Year to year retention rates, as well as non-returning student rates, were calculated based on data available at each institution.
VSU PIPELINE

For every 100 Freshmen

1. Recruitment & Admissions

2. Freshman Focused Programs & Services

3. Sophomore Focused Programs & Services

4. Junior & Senior Focused Programs & Services

5. Time-to-Degree Efforts
6. Increased Engagement Programs & Services
7. At-Risk & Other Programs & Services

28 Leave
72 Return Sophomore Yr
59 Return Junior Yr.
18 Leave
41 Graduate

59 Leave
13 Leave

24 Dropout & Other
32 Transfer to 2 or 4 yr. Inst.
3 Graduate in 6.5 - 9 years
Detailed Steps

There are 7 points in this pipeline at which institutions can attempt to intervene to retain more students from year to year and graduate more students within six years.

1. Recruitment & Admissions – Efforts that focus on recruiting, admitting, and enrolling students who want to graduate.

2. Freshman Focused Programs & Services – This includes efforts that exclusively target freshman students.

3. Sophomore Focused Programs & Services – This includes efforts that exclusively target sophomore students.

4. Junior/Senior Focused Programs & Services – This includes efforts that exclusively target upperclassmen.

5. Time-to-Degree Efforts – This includes efforts to reduce the time it takes to complete a bachelor’s degree, such as ensuring that courses taken are needed for the intended degree. Also, programs with a large number of required credit hours can impede a student’s chance for graduation within six years.

6. Increased Engagement Programs & Services – The population of non-returning students leave the institution to attend other institutions, which suggests these students were not sufficiently engaged. Therefore, engaging programs and services help students form stronger connections with other students and the campus.

7. At-Risk and Other Programs & Services – This includes programs and services to assist populations typically at-risk of dropping out or who have a decreased chance for graduation.
Step 1 – Begin the pipeline with 100 first-time, full-time freshmen from the institution.

Step 2 – Determine the freshman-to-sophomore institutional retention rate (the number of the students from Step 1 who returned for their sophomore year). The remaining number represents the students who do not return after their freshman year.
• Step 3 – Determine the sophomore-to-junior institutional retention rate (the remaining students from Step 2 who returned for their junior year). The remaining number represents the students who do not return after their sophomore year.

• Step 4 – Determine the junior-to-senior institutional graduation rate (the remaining students from Step 3 who completed their senior year and graduated). The remaining number represents the students who do not return after their junior year.
• Step 5 – Add the number of students who left in Steps 2 through 4.
• Step 5A – From the total of Step 5, determine the number of students who have graduated within 6.5 to 9 years from the original institution.
• Step 5B – From the total of Step 5, determine the number of students who transfer to other two-year or four-year institutions.
• Step 5C – Determine the remaining number of students from Step 5 who will not be included in Steps 5A or 5B – this is the number of dropouts and other.
Limitations

- Dependence upon availability of data on retained and non-returning students for accurate categorization
Results – Georgia Institution

- Of every 100 freshmen, 72 were retained and the other 28 left the institution. Of the 72 students retained to sophomore year, 59 of every 100 students were retained to the third year; an additional 13 students left the institution. Of the 59 students who were retained to the junior year, 41 graduated within six years, however, an additional 18 failed to do so.

- As shown on the left side of the pipeline, a total of 59 of every 100 students failed to graduate from the institution within six years. Of the 59 non-returning students, 24 dropped out, 32 transferred to other institutions, and 3 graduated between six and a half to nine years after entering the pipeline.
Possible Implications

- By providing this information in a concise format, administrators can see where students are going and make changes to increase retention.

- IR offices can provide pipelines by major, academic department, or college in addition to the overall university pipeline.

- Can be easily shared with constituencies on campus who need to better understand retention and graduation issues within the institution (i.e. faculty, advisors, etc.).
Thank You

Questions & Comments