Closing the Loop: Using Data to Improve the Learning Environment for Students

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Overview

Student Affairs professionals should use data to make decisions that positively impact the following:

• Programs
• Student retention and graduation rates
• Student behaviors
• Budgeting processes and allocations
Programs

Identify, gather and analyze the type of data that improves services, participation, efficiency, customer service, and more. Many process-oriented Student Affairs departments such as Financial Aid, the Registrar, Admissions, etc. benefit from this type of data collection and analysis.
Example: Financial Aid

In 2010-11, Financial Aid set an objective to decrease average financial aid processing time from 10 weeks to 6 weeks.

They then identified areas where they could improve the process, including:

• cross-training staff to have more reviewers available during peak times
• implementing a document screening process to catch student errors earlier
• communicating discrepancies to students more quickly, so students can fix the errors
• adding an online verification process to the application to help cut down on the number of incomplete documents submitted

This objective was met by Summer 2012, where processing times averaged 5 weeks. The FA Director has since set an objective to further decrease processing time.
Example: Student Health & Counseling Services (SHCS)

SHCS gathers many types of data in an effort to increase utilization, satisfaction, and quality.

- Number of Patient Visits
- Number of Patient Visits/Provider
- Appointment “No Show” Rate

- Wait Times
- Patient Satisfaction
- Patient Utilization Rates
- Cost of Care
- Number of Students Left Without Being Seen (LWBS)
Program Objectives

• Counselors will spend an average of 60% of their time providing direct client service.

• Medical providers will screen 90% of patients seen in the primary and urgent care clinics for depression using the Patient Health Questionnaire (PHQ 2 and/or PHQ 9 version) over the next academic year and make an appropriate referral to CAPS for follow-up as necessary.

SHCS has made significant progress toward meeting each of these objectives.
Retention & Graduation

Departments whose programs likely impact student participants’ GPA, retention rates, and graduation rates should gather the type of data that demonstrates a likely correlation between their program and intended outcomes.

SA departments that might use these metrics include advising, housing, student activities, leadership programs, mentor programs, and tutoring programs.
It is important to note that a particular intervention may be correlated with changes in GPA, retention and graduation. However, it is impossible to determine that that particular intervention caused those changes.
Example: Second Year Advising Program (SYA)

Academic Advising staff used Office of Institutional Research (OIR) data to discover that students who enter their third semester on academic probation are the most likely to be disqualified or withdraw.

The examination of 2003 data showed that at the end of their third semester 24% of these students had been disqualified or dismissed, and 44% had withdrawn—a combined 68% attrition rate.
To address this high attrition rate, Student and Academic Affairs developed the SYA Program as an intervention. This intervention requires students to meet twice with an academic advisor, participate in a workshop, and connect with an advisor in their major department.
This table shows the status of the Fall 2009 and Fall 2010 probation students following their third semester after taking part in the SYA Program:

<table>
<thead>
<tr>
<th>Cohort (N=)</th>
<th>Good Standing</th>
<th>Probation</th>
<th>Disqualified/Dismissed</th>
<th>Withdrew</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009 (N=235)</td>
<td>43%</td>
<td>38%</td>
<td>15%</td>
<td>4%</td>
</tr>
<tr>
<td>2010 (N=321)</td>
<td>60%</td>
<td>28%</td>
<td>11%</td>
<td>1%</td>
</tr>
</tbody>
</table>

In Fall 2009, over 81% of SYA participants were still eligible to continue on to their fourth semester and in Fall 2010, 88% were. This is compared to only 27% of probation students who were eligible to continue to their fourth semester in 2003, when SYA did not exist.
Example: Housing & Residential Life (H&RL)

H&RL uses OIR data to monitor the GPA, retention, and graduation rates of resident students (N=1600).

They then use this data to modify policies and programs, working to improve the academic success of resident students.
## Example: H&RL (cont.)

<table>
<thead>
<tr>
<th>Year enrolled</th>
<th>Persistence – On-campus residents Freshman year to Sophomore Year</th>
<th>Persistence – Off-campus residents Freshman year to Sophomore Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2000</td>
<td>Fall 01 = .79 Spring 02 = .73</td>
<td>Fall 01 = .74 Spring 02 = .69</td>
</tr>
<tr>
<td>Fall 2001</td>
<td>Fall 02 = .80 Spring 03 = .73</td>
<td>Fall 02 = .75 Spring 03 = .69</td>
</tr>
<tr>
<td>Fall 2002</td>
<td>Fall 03 = .78 Spring 04 = .72</td>
<td>Fall 03 = .75 Spring 04 = .69</td>
</tr>
<tr>
<td>Fall 2003</td>
<td>Fall 04 = .82 Spring 05 = .77</td>
<td>Fall 04 = .79 Spring 05 = .73</td>
</tr>
<tr>
<td>Fall 2004</td>
<td>Fall 05 = .82 Spring 06 = .77</td>
<td>Fall 05 = .79 Spring 06 = .72</td>
</tr>
<tr>
<td>Fall 2005</td>
<td>Fall 06 = .75 Spring 07 = .69</td>
<td>Fall 06 = .77 Spring 07 = .69</td>
</tr>
<tr>
<td>Fall 2006</td>
<td>Fall 07 = .77 Spring 08 = .74</td>
<td>Fall 07 = .76 Spring 08 = .70</td>
</tr>
<tr>
<td>Fall 2007</td>
<td>Fall 08 = .80 Spring 09 = .75</td>
<td>Fall 08 = .76 Spring 09 = .71</td>
</tr>
<tr>
<td>Fall 2008</td>
<td>Fall 09 = .80 Spring 10 = .73</td>
<td>Fall 09 = .77 Spring 10 = .72</td>
</tr>
<tr>
<td>Fall 2009</td>
<td>Fall 10 = .79 Spring 11 = .77</td>
<td>Fall 10 = .79 Spring 11 = .77</td>
</tr>
<tr>
<td>Fall 2010</td>
<td>Fall 11 = .81 Spring 12 = .78</td>
<td>Fall 11 = .89 Spring 12 = .79</td>
</tr>
</tbody>
</table>
In 2011, Sacramento State administrators studied student leader data to discern the effect of student engagement on academic success.

The data suggested a strong correlation between leadership activities and graduation, retention, and performance success. When controlling for HS GPA and commuter status (strong predictors of graduation rates), club leaders’ graduation rates were still higher than those of other students.
Native Freshman: 6-year Graduation Rate for 2003-2004 Cohorts

- HS GPA ≥ 3.0 + Commuter: 73.8%
- HS GPA < 3.0 + Commuter: 52.6%

Club Leaders: 73.8% vs. Other Students: 52.6%

Native Freshman: 6-year Graduation Rate for 2003-2004 Cohorts
Knowledge Acquisition

In an effort to measure student learning, many departments attempt to measure students’ knowledge acquisition on discrete subjects after taking part in a workshop, presentation, event, etc.

Often, this knowledge acquisition is measured by a pre-/post-test combination.
Discrete Knowledge Acquisition

Since it is relatively easy to measure what students learn by participating in a single conference, workshop, or lecture series, many SA departments gravitate toward this type of “point of contact” assessment.

It is much more difficult to assess students’ ongoing ability to apply, analyze, or synthesize what they are learning in co-curricular activities.
Career Center staff assess the efficacy of their Government Job Search Academy by giving participants a post-test upon completion.

Participants are required to attend 5 workshops and meet with an assigned career counselor.

The post-test attempts to measure their knowledge of the federal and state government job search process and best practices related to it.
Example: Student Athlete Resource Center (SARC)

After prospective student athletes and parents participate in an NCAA Information Session, SARC staff assess their understanding of basic Division I eligibility and recruiting rules. They use a pre-/post-test format to attempt to measure the change in knowledge. The assessment shows that the sessions are largely successful in helping students remain in NCAA compliance.
Many Student Affairs departments assess their student employees’ knowledge of job-related skills to determine how effective their training materials and programs are.

Examples of these student employee groups include those who work in orientation, the children’s center, Enrollment Operations Support (IT), Testing Center, Veterans Success Center, and more.
Self-Reported Data

It is important to note that many surveys that attempt to measure a student’s personal development rely on *self-reported data*. This data reflects a student’s own perception regarding him- or herself, or the program, activity or event he or she took part in.

*This indirect data can be useful but is often not conclusive.*
Other Student Affairs units were interested in their student employees’ perception of their development of leadership, interpersonal, and other skills, which would be of use to them in and outside the classroom.

The following units administered a survey to attempt to measure this data: ASI, Enrollment Operations Support (IT), Financial Aid, the Multi-Cultural Center, PRIDE Center, University Union, The WELL (recreation and wellness facility), Women’s Resource Center.
Behavior

Some Student Affairs units are beginning to attempt to measure behavior change in students who use their programs and services.

These units include H&RL, Student Conduct, Academic Advising, The WELL, SHCS.
Students will report making healthier choices regarding alcohol use after attending an alcohol education class.

Students are required to take the class after being documented for alcohol violations, and knowledge acquisition is measured by a pre-/post-test. The assessment seems to indicate the classes are successful based on the students’ self-reported behavior.

In the future, H&RL and Student Conduct would like to track the recidivism rates of these students.
Example: Academic Advising

Academic Advising staff assess the behaviors and factors associated with academic success of students participating in the Second Year Advising Program.

Students attend workshops in which they learn to identify what might be keeping them from college success as well as measures to help mitigate those factors.

These students report changing their behavior toward better academic success habits; these results correlate with the SYA program retention rates mentioned earlier.
Example: Student Health & Counseling Services (SHCS)

SHCS staff tracked data for participants in the SUCCEED program, a 10-week weight loss program, to assess their completion rates and progress.

The SUCCEED program includes weekly one-on-one peer counseling visits, nutrition assessment(s) by a dietitian, periodic group meetings, and cooking demonstrations.
For the pilot assessment, SHCS staff specifically tracked participants’ sodium and fiber intake, since those are two important factors linked to weight control and chronic disease prevention. Participants’ sodium intake decreased, and fiber intake increased, both intended outcomes (though not to the extent SCHS staff hoped).

The process of assessing the SUCCEED program and participants indicated a need to refine the program and the assessment measures—all part of the process.
Budgeting

Departmental assessments can be used to demonstrate—in data-driven ways—the value and/or cost-effectiveness of programs, services, and staff. Such verification is important in declining budget times.

All of the previously mentioned types of data can be useful in budget decisions, but here are two more that can be especially so:

• Participation or utilization data
• Workload estimators and productivity data
Participation and Utilization Data

It is critical (and often the “norm”) for many university departments to know how many students they serve.

However, participation and utilization data for some co-curricular activities may not be tracked on some campuses—or if it is tracked, it is not tracked in a methodical, consistent way.

Nearly every Student Affairs unit tracks participation and/or utilization in one way or another (now that we’re 6+ years into the process).
Workload Estimators and Productivity Data

Workload estimators can help make the case that a certain number of staff or a certain budget is necessary for operation.

Workload estimators show how much time critical processes or appointments take and how many staff are required to meet department needs in a timely manner, e.g.:

- Financial aid packaging, transcript evaluation, etc.

- Academic advising appointments, Health Center patient visits or counseling appointments, etc.
Divisional assessment efforts have played a critical role in the University budgeting processes and have been the centerpiece of Student Affairs’ annual presentations to the University Budgeting Advisory Committee (UBAC).
Due in large part to its consistently evidence-driven budget requests, Student Affairs has fared much better than other divisions at Sacramento State and has suffered less severe reductions over the last several years.

During a time of reductions for most divisions, SA leaders used workload estimators to demonstrate the need for 27 additional positions—and were given permission to hire the staff.
THANK YOU VERY MUCH.