We May Already Have the Data You’re Searching For

Have you ever been searching for data you need for a particular project, but didn’t think it existed? If the questions IR gets on a regular basis are any indication, many of you have had that experience.

The fact is, we have a lot of data from a variety of sources, that are not always used to their fullest capacity.

Here’s an example. In completing their program review recently, the Learning Center established a new set of Service Area Outcomes. These were fairly straightforward:

- Students that utilize the Learning Center services will improve their course completion rate.
- Students that utilize the Learning Center services will exhibit behavior that promotes student success.

Simple, right? Except, you have to measure those.

The first turned out to be pretty simple. The Learning Center keeps track of the number of visits for each student. By linking those data to data for course success rates, we were able to determine that success rates do increase with the number of Learning Center visits. We examined this separately for English, math, and for all other classes and found the same correlation.

Of course, this doesn’t necessarily mean the Learning Center caused the higher success rates. It could well be that students who are conscientious about visiting the Learning Center also apply those same standards to their course work. But, we did establish a correlation between the two.

The second outcome was a bit more tricky. What behaviors promote student success? Would we need to survey Learning Center students and students who do not use the Learning Center to see if there were differences in behaviors? That could be a lot of work.

Except, there are already data available for this.

Every three years, starting in 2011, Porterville College has participated in the Community College Survey of Student Engagement (CCSSE). We use CCSSE Key findings to measure ourselves against a nationwide cohort of other community colleges. We’re also able to compare student results with a survey of faculty. And, several questions from CCSSE are used in our Strategic Plan to measure progress over time. We use specific questions occasionally for other purposes, but inconsistently and we don’t use all of them.
So, we looked for two things in the CCSSE questions. First, we needed to identify students who use the Learning Center. CCSSE is a national survey, so they try to use terms that are somewhat universal. We found two questions that would help. Two parts of question 12 ask about how often students use the following:

- 12d. Peer or other tutoring
- 12e. Skills labs (writing, math, etc.)

These are services provided by the Learning Center, so we have data on who uses those services.

Next, we needed to be able to measure “behaviors that promote student success.” Luckily, that’s what CCSSE is all about. Each of the questions in CCSSE come from the academic literature on what works for student success. So in this case, we’re dealing with questions that have already been vetted for that very purpose. We just needed to choose which ones we’d like to focus on.

The Learning Center chose to focus on how often students report doing the following:

- 4a. Asked questions in class or contributed to class discussions
- 4c. Prepared two or more drafts of a paper or assignment before turning it in
- 4e. Come to class without completing readings or assignments
- 4k. Discussed grades or assignments with an instructor
- 4m. Discussed ideas from your readings or classes with instructors outside of class
- 4s. Skipped class
- 6b. Number of books read on your own (not assigned) for personal enjoyment or academic enrichment
- 10a. Preparing for class (studying, reading, writing, rehearsing, doing homework, etc.)

These are all behaviors which can promote (or inhibit) student success. Moreover, question 6b is one that has been a focus of recommendations already at PC because our students read for enjoyment less often than the national average.

So, what did we find? The information was included in the Learning Center program review, but here’s a quick summary:

- Students who use tutoring services (question 12d) and skills labs (12e) are more likely to ask questions in class (q4a).
- Students who use tutoring services are also more likely to prepare two or more drafts of a paper (q4c) except it didn’t quite meet the .05 threshold for the effect from q12e (p=.06).
- Use of tutoring services seems to have little impact on coming to class without doing the reading (q4e), but students who use skills labs more are less likely to come to class without reading.
• Similarly, discussing grades with an instructor (q4k) was associated with 4e, but not 4d.
• Use of both tutoring services and skills labs are associated with discussing readings outside of class (q4m); the difference is much larger for tutoring services.
• Use of skills labs is associated with students being less likely to skip class (q4s), but not tutoring services.
• Students who use tutoring services are more likely to read books on their own (q6b). Not so much with skills labs.
• Students who use skills labs are more likely to spend more time preparing for class (q10a).

It is important to clarify again that we cannot establish causality here, only associations. But the Learning Center now has some baseline data on its services and how they impact students. They can use these data to plan services for the future, and emphasize those they feel are most effective. And, when the college next conducts CCSSE in Spring 2020, we’ll have additional data to compare and see if changes have occurred.

And all of this was done with data we already had, which had been collected for other purposes.

In conclusion, if you have a data need, remember to look right around you (and check with IR) before looking to create new data sources. We may already have what you need.

Questions, as always, are welcome. You can contact the research office at mcarley@portervillecollege.edu.