Student Demand: The Missing Ingredient in Program Assessment

Colleges and universities announced almost 1,000 new academic programs in 2018, and are on pace to reach similar levels in 2019. While new programs present opportunities for growth, they come with significant risk as well, and need to be carefully vetted. Current programs may be ready for growth, or becoming expensive and long in the tooth. What elements should institutions consider when making program decisions, and what data sources provide the most comprehensive evaluation?

A complete program assessment includes information, by program, on alignment with the institutional mission, academic performance, financial margins, and market attractiveness. The market evaluation should include an analysis of student demand, employment, competition, and the appropriate degree level for the program.

Recently, however, the government, parents, and students have pushed higher education to focus primarily on academic programs that fulfill employer needs and create a clear path from a program of study to a job. Schools have been encouraged to launch new programs that align with local and regional employment markets, often to address perceived "skills gaps" and state workforce initiatives. Overemphasis on employment poses a number of risks for students and the institution; in particular, choosing programs because they align with employer demand does not guarantee students will actually enroll in them.

As a result, a single-minded focus on employment may lead to expensive, empty classrooms and damage the financial sustainability of the institution. In fact, Gray's recent analysis of the relationship between market demand for academic programs and program economics reveals that employer needs have little effect on program margins, while **student demand** is highly correlated with program profitability.

To keep classrooms full and still provide promising careers for graduates, colleges need to assess employer needs ***and*** student demand for specific programs. This article will focus on the

purpose and techniques for understanding student demand, so institutions can make it an ongoing part of program assessments and enrollment management.

If we build it, will they come?

Evaluating student demand begins with defining your market – that is, where your students come from. Mapping students' home addresses (not their on-campus addresses) can give institutions a realistic view of the market or markets they serve. Generally speaking, the core market will include over 80% of your students; for many colleges this covers a radius of approximately 30 miles around the campus. Some schools' markets are much smaller (especially in urban areas) and others cover entire regions, the US, or even the globe.
Once you have mapped and defined your market, you can begin to pull the related data on student demand for programs. Some data sources are familiar and readily-available, while others are more difficult or expensive to access. Regardless, it is important to use more than one data source to assess student demand, as each source has strengths and weaknesses that should be considered in evaluating overall demand for a program.

A good place to start is reviewing internal enrollment statistics to see which programs are attracting the most students right now. Of course, enrollment figures may not accurately reflect the market for the program, since they also reflect the program's reputation and the institution's marketing efforts, and do not include students who chose other institutions.

IPEDS completions data gives the most complete view available on student demand at the local, state, and national level, both online and on-campus. Completion volumes can be compared across programs and tracked by institution, award level, modality, and geography. However, IPEDS data is a lagging indicator, reflecting the majors that students chose two to five years in the past–sometimes even longer.

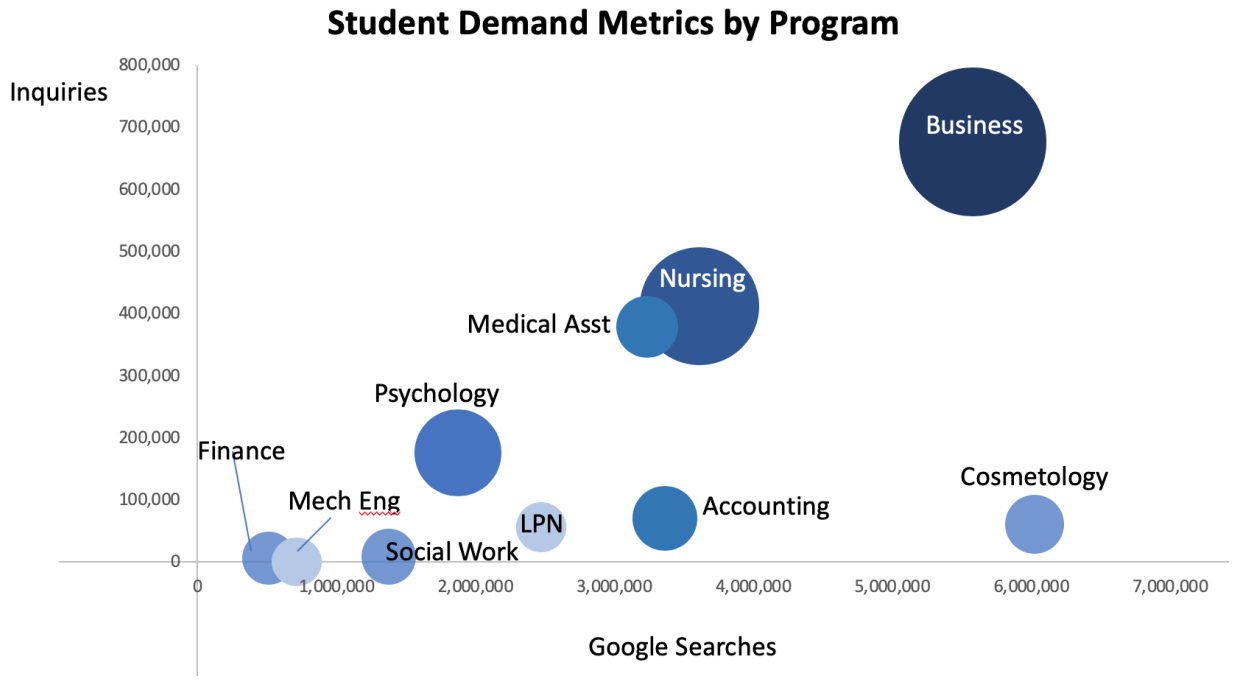
Measuring current student demand for programs is trickier, but vital to understanding what students are interested in *now*. Surveys of high school students can provide insights into what disciplines potential students are considering, as can data available from testing services such as The College Board and ACT. But these sources can be costly and exclude large populations of students who do not respond to surveys or take college entrance exams.

Gray recommends two additional datasets that provide key insights on current student demand for academic programs: inquiries and Google search volumes. Inquiry data for specific programs may be available from schools' marketing agencies. More comprehensive datasets on programmatic inquiries are available from independent aggregators who use internet ads to collect leads from students. For example, Gray's inquiry database tracks over 70 million inquiries from students from across the country for online and on-campus programs at all award levels. The data is current, covers hundreds of programs, and can be compiled for any geographic market definition. The data does have its limitations: inquiry volumes can be sensitive to local or national marketing activities, and tend to be more aligned with vocational programs, online programs, and programs offered by for-profit institutions.

To complement inquiry data, Gray recommends measuring Google search volumes for academic programs. Like inquiry data, Google searches are a very good indicator of current student demand for academic programs and can be tracked by geography, down to the zip-code level. Tracking Google search volumes for more than one program and hundreds of zip codes is expensive and time-consuming, so Gray suggests using internal or external resources and systems so you can efficiently compare search volumes across all programs in each of the markets you serve. On the downside, by definition, Google program searches are limited to students who are seeking specific programs. Program keywords searches may exclude students who are searching for a college first and may not choose a major until sophomore year, or later. As a result, program searches tend to overrepresent online programs and more vocationally-oriented programs at the expense of more general programs and the humanities.

Using more than one source of data for student demand mitigates the limitations of each source. For example, Figure 1 tracks all three student demand metrics (Google, inquiries, and IPEDS) for 10 high-demand programs. Programs with large circles in the upper right, e.g., Nursing and Business, perform well on all three metrics: they are in big markets. Medical Assistant has strong current interest (inquiries and Google searches) but the circle size for IPEDS completions is small. This suggests that past interest was low, which led to relatively few IPEDS completions, but current interest is substantial–this may be a growth opportunity.

Figure 1: A Multi-Faceted Analysis of Student Demand for Academic Programs



Size of circle represents 2017 completions. Inquiries and Google searches: January through September 2019

A final note on student demand – do you need to consider international students? Foreign students accounted for 4.5% of all postsecondary enrollment in 2017-2018 according to IPEDS;

for certain programs, the percentage is much higher. For example, IPEDS reports that 49% of Computer Software Engineering completions were by international students in 2017.

Understanding which programs are of particular interest to international students can provide a competitive edge for those wishing to recruit students from abroad. In some cases, such as Computer Science, most students are foreign nationals. To size the international market for a program, you can refer to IPEDS, which tracks international student completions by program. For more current data, institutions can see current international student enrollments by general discipline (but not specific programs) at the Open Doors' online data portal. Gray Associates offers current data on international interest by program and country of origin.

Creating a database of all programs–or at least all of your current and proposed new programs–will allow you to compare programs, which is a great help in interpreting results. For example, if a new program has twice the inquiries, Google searches, and completions of a large current program, you can reasonably assume the market is at least as large as your current program.

Conclusion

To inform their program decisions, colleges need robust market data on student demand *and* employer needs. Too much focus on employer needs can lead to expensive, empty classrooms. Too much focus on what students want may increase revenue and fill seats, but graduates may not find jobs. Good assessments balance student demand and employer needs to find programs that increase enrollment, revenue, and margins and enable graduates to get good jobs.