



From Practice to Policy:

How Institutions Leverage Data to Improve Student Outcomes

Introduction

As policymakers explore options for building California's first early education to workforce (P-Workforce) statewide longitudinal data system, local initiatives to improve outcomes through data collection and analysis offer important takeaways. Sluggish degree completion rates plague the state's higher education segments, leaders, and students. Recent data show that the three-year completion rate for the California Community Colleges was 29 percent, and the six-year completion rate was 54 percent at the California State University (CSU) and 83 percent at the University of California (UC).¹ These data show that economic opportunity for California's students is often delayed, jeopardizing students' earning potential and reducing institutional capacity. Disaggregating the data by race/ethnicity, gender, income status, and region presents an even more troubling outlook for specific populations.²

Institutional leaders and state policymakers are working to reduce barriers that stall or inhibit postsecondary completion. While data may often be thought of as an accountability tool, it is also a critical driver of systems change. This brief explores how one institution, the University of California, Riverside (UCR), used data to improve completion rates and reduce time to degree. Drawing from interviews and publicly available documents, the brief describes how leaders can leverage data to modernize institutional practices and inform continuous improvement. It is the first in a series of briefs that will highlight promising institutional strategies that can improve student outcomes across California's diverse higher education system.

Improving Degree Completion at the University of California, Riverside



In a May 2013 UC Regents meeting, Governor Brown publicly expressed frustration with bachelor's degree completion rates at California's public institutions, calling out UCR as having significant room for growth. UCR's four-year graduation rate was 42 percent at the time, the lowest among all campuses in the system. The university responded by developing the Graduation Rate Task Force to address its extended time to degree and relatively low completion rates.³ The taskforce used multiple sources of data and campus resources to clarify problems, identify opportunities, and roll out interventions. Within a few years, the university increased its on-time completion rates.

UCR Graduation Rate Task Force

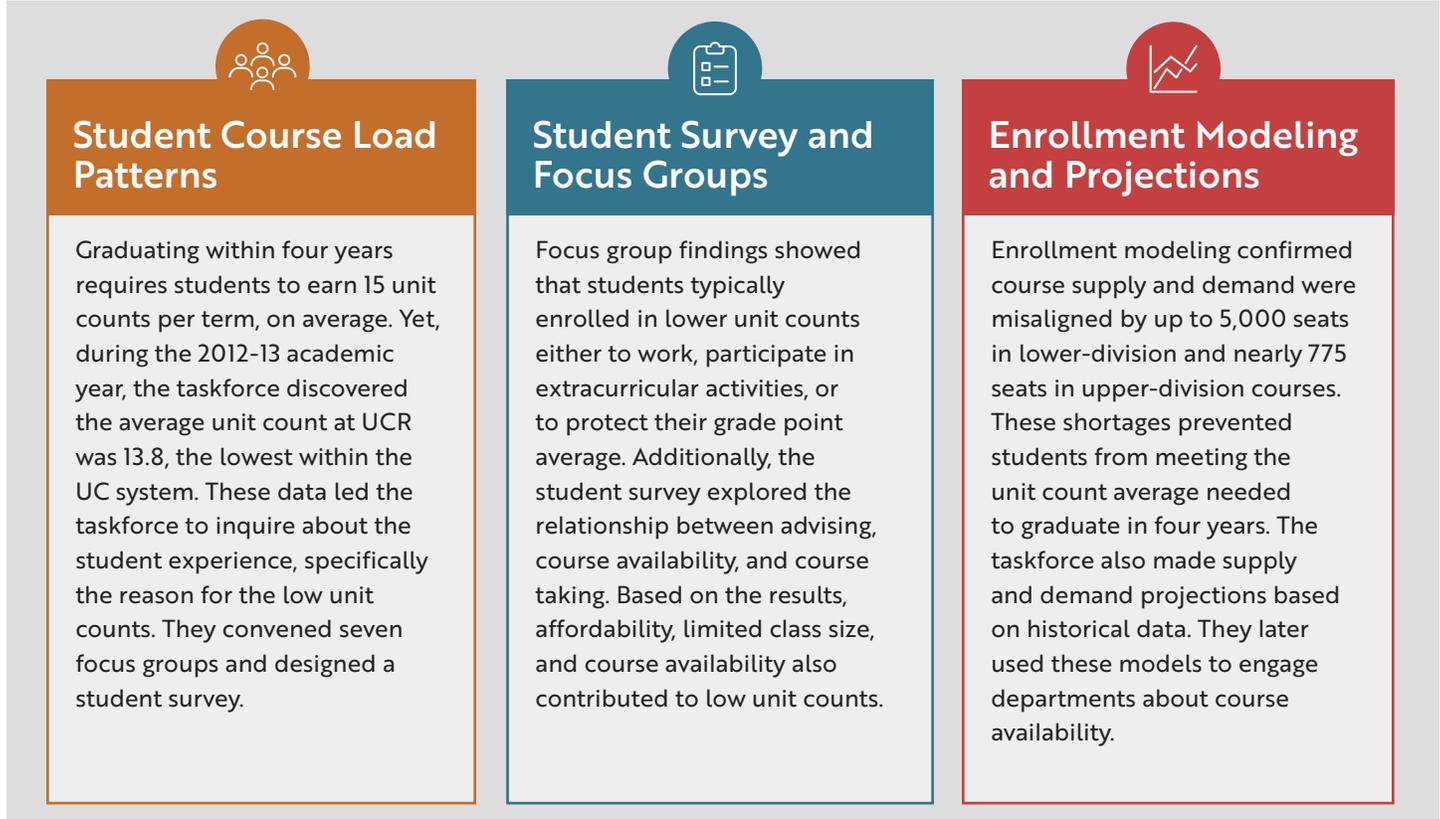
UCR's Graduation Rate Task Force included faculty from two departments, institutional research (IR) analysts, as well as college and campus administrators within academic affairs. Once assembled, the group collected and examined admissions, enrollment, retention, and graduation rate data to understand student pathways by demographic and academic background, enrollment status (i.e., full- versus part-time), course selection, and college or department. Analyzing student and institutional data helped UCR's taskforce develop 37 recommendations, a subset of which were implemented early on. By the 2014-15 academic year, UCR's four-year degree completion rates improved by 11 percentage points and six-year degree completion rates improved by seven percentage points.⁴ The taskforce's ability to use information from multiple sources demonstrates the role data plays in strategies that all institutions and the state can build upon.ⁱ

Data as a Tool for Iteration

The taskforce employed data in a multistep process of inquiry to facilitate evidence-based decision-making. It began by naming the challenge and identifying the data needed. Figure 1 highlights other findings the taskforce uncovered using three key strategies.

In addition, institutional data revealed that budget cuts in response to the Great Recession led to a reduction in advising staff across campus. Those cuts resulted in student-advisor ratios of 600:1, two times higher than the national standard, and coincide with the period of increased time to degree. This research does not attempt to examine existence of a causal relationship between advising and time to degree or average unit counts per term. However, student, institutional, and societal factors may be relevant as leaders design interventions that promote student success.

Figure 1. Three Strategies for Using Data



i. This brief does not attempt to evaluate the UCR Graduation Rate Task Force or its work.

By contextualizing quantitative and qualitative data, the taskforce could develop recommendations that were responsive to student needs and institutional context. UCR's process illustrates multiple data-driven methods that other institutions and agencies can leverage to improve outcomes.⁵

Data as a Strategy, Not a Solution

All institutions have access to data that could help identify the barriers their students face. Analyzing both student and institutional data are critical to developing and implementing context-based solutions. However, data alone are not enough. The right decision-makers must be engaged throughout the process. Communication between those analyzing the data, those developing policy recommendations, and those charged with implementing changes is critical. Using data to facilitate conversations on campus is necessary to address completion barriers, especially when policy implementation falls outside the purview of those leading the investigation. For example, the taskforce analysis led to a recommendation of adding summer courses and offering select courses over multiple terms to help students who struggled to enroll because of limited class size or availability.



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Supporting students to complete their degree in a timely manner requires ongoing effort given changing student and institutional contexts. Colleges must institutionalize collaborative space for faculty, staff, researchers, and administrators to review data. This can help leaders make evidence-based recommendations and implement evidence-based strategies. As colleges contemplate organizational redesign,⁶ at least three issues to consider emerge from UCR's work that may help institutions and state policymakers further address time to degree and attainment gaps.

1. Inclusive Engagement Across Campus

Academic affairs and student services have historically functioned as siloed organizational units within colleges. In general, academic affairs focuses on student experiences within the classroom (e.g., curriculum, academic standing), whereas student affairs focuses on experiences outside the classroom (e.g., counseling, tutoring, and other programs designed to support vulnerable populations). Higher education leaders have increasingly acknowledged the potential benefit of these units working collaboratively to support student success.⁷

In the case of UCR, the taskforce comprised representatives exclusively from academic programs and academic affairs. While interviewees reported that taskforce members were attentive to the implications of equity in their work, incorporating staff (including advisors) who specialize in meeting the needs of the most vulnerable student communities could accelerate future efforts to close equity gaps. An inclusive approach to reviewing data and developing solutions can improve consistency in messaging for students and alignment between academic policies and student support services.

2. Institutional Research as an Internal Resource

UCR's taskforce relied heavily on data and analysis from its IR department. Colleges often staff these units primarily to support state and federal compliance reporting, leaving relatively little capacity for other analytical requests and interests. This limited scope may contribute to a campus culture that fails to recognize IR as a critical internal resource and inconsistently involves them in major projects. At its best, IR can ensure access to high quality campus-level data and contribute to analytical conversations that may inform policy. Since the taskforce work, UCR's IR office has reconceptualized some processes to better manage its capacity for data requests and providing on-campus partners and the public with equitable access to data.ⁱⁱ UCR's experience could be a model to shift IR from a sidelined partner to the trusted source of consistent analytical support across campus units. Given that these offices are often underfunded and experience high turnover,⁸ a more intentional vision for IR's role on campus could strengthen the development of data-driven programs and policies that support student success.

ii. See the UCR Institutional Research webpages on Campus Statistics and Common Data Sets: <https://ir.ucr.edu/>.

3. Local, Regional, and State Data Needed

Figuring out where students come from and end up along the education-to-employment pipeline requires analysis of local data and substantial resources to develop data sharing agreements. Although current state policy provides a framework for data sharing, it has not been adopted in ways that are comprehensive, consistent, transparent, or cost effective. A statewide longitudinal data system with centralized data matching would complement local efforts like the UCR Graduation Rate Task Force. Such a system could reduce the need to execute data sharing agreements and expand analytical capacity to monitor institutional and statewide trends. It would provide equitable access to information about student outcomes and aid in the development of fiscally pragmatic policy solutions.⁹ The state would also benefit from creating an independent agency that provides guidance on how to leverage local, regional, and state data. Such an entity does not currently exist in California.

Conclusion

Institutions and policymakers must work together to identify and tackle barriers that delay degree completion. However, their policy recommendations and implementation solutions must be rooted in the use of data. An inclusive approach to continuous improvement can help colleges maximize resources by leveraging skills across campus and institutionalize a culture of data as a strategy, not a solution. Though individual campus data are important to identify specific barriers that impact degree attainment, data at the state level would complement these efforts. A system for collecting related data at the state level would provide policymakers and institutions with the information needed to recognize persistent challenges and comprehensively understand how students are impacted across segments and the state. A culture of data-based decision-making across institutions and at the state level could elevate California as a national leader in supporting student success and timely completion.

Notes

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