INSTITUTIONAL CONTEXT

In 2004, as part of its strategic planning process, the University at Buffalo (UB) committed to increasing the share of students who return to UB for their second year from 87.4 percent to 91 percent, who graduate with a bachelor’s degree within four years from 34 percent to 55 percent, and who graduate in six years from 59 percent to 75 percent by 2020.

To achieve these goals, the Office of the Senior Vice Provost for Academic Affairs worked with faculty and staff to design Finish in 4, which launched in 2012. Participation was open to all UB undergraduates, and students who joined the program pledged to follow a delineated, major-specific, eight-semester plan of classes in addition to committing to timely advising, on-time course registration, and career assessment. If the participant fulfilled these obligations and was still unable to graduate in four years, the university pledged to pay for any additional courses necessary to finish their bachelor’s degree.

To ensure the success of Finish in 4, the university needed to 1) increase course offerings—adding approximately 10,000 seats and 30,000 credit hours in key introductory courses—to meet enrollment demand and prevent disruption of students’ academic plans; 2) enhance orientation programs for new students; and 3) add more academic and career advisors to guide students along the path to a degree. The program would require multiple efforts to improve student retention, including increasing student success in introductory courses with historically high failure rates and identifying struggling students as early as possible to help get them back on track.

The Finish in 4 program presented an important lesson for the university: they needed access to better data to track proven indicators of success throughout students’ academic careers, to identify the barriers to graduation, and to understand how to use that knowledge to inform student success strategies. To that end, the university launched its Student Success Initiative in 2013, to provide comprehensive oversight for university-wide academic advising and tutoring, as well as for the Finish in 4 program.

USING DATA TO IMPROVE STUDENT OUTCOMES

The Student Success Initiative guided the implementation of a new campus-wide early alert system that allowed staff to connect with students who appeared to be straying from their academic plans. The Student Success Collaborative (SSC) is a web-based early alert system comprised of a predictive data-analytics engine and a web-based case-management tool for academic advising. The latter provided advisors with an array of specific student characteristics (GPA, major, student demographics, risk indicators, etc.) so that they could assess a student’s academic progress at a glance and intervene with students who were not on track to graduate in their major. Based on 10 years of student data gathered from UB’s student information system, the SSC provides two major predictions for current students: 1) an individualized risk score that predicts a student’s
likelihood to graduate from the university, and 2) the identification of key courses in a major that could be used to predict student success in earning a degree in that major. Using the latter prediction, academic departments can set success markers—such as a minimum recommended grade and a suggested deadline for class completion—for each predictive course, allowing advisors to monitor a student’s progress and know when a student was off the path. Advisors can either steer the student toward the services they need or redirect them toward alternative majors.

RESULTS

Finish in 4’s first four-year class graduated in spring 2016. Early estimates indicate that the program has succeeded in enabling participants to meet completion goals. An estimated 63 percent of the nearly 1,500 students who enrolled in the program in 2012 graduated within four years, compared with an estimated 53 percent of undergraduates who entered that same year but elected not to participate in the program.

UB's overall four-year graduation rate has improved, from 35 percent to 58 percent, for students graduating between 2005 and 2016 (see Figure 1). For first-year students who started between 2005 and 2009, the university saw a decrease in the time it took students to complete their degree, from 4.22 to 4.02 years on average.

Figure 1. Four-year Graduation Rate at UB

The six-year graduation rate also increased, from 59 percent for students who graduated in 2005 to 73 percent for those who entered in 2010. During this period, the six-year graduation rate for underrepresented minorities has increased 23 percentage points to 64.2 percent for those who started in 2010 having earned their degrees by 2016, and the four-year rate has increased 30 points to 48.8. Overall, the number of undergraduate degrees awarded by the university has grown by more than 25 percent, from 3,936 in 2005 to 5,379 in 2016 (see Figure 2).

Figure 2. Bachelors Degrees Awarded at UB

First-year retention for Finish in 4 participants is currently at 89 percent—higher than the 84 percent of non-participants who return their second year, but below UB’s goal of 91 percent. The university believes that, as the Student Success Initiative and the early alert system take hold on campus, retention rates will likely improve. Moreover, since 2012, Finish in 4 has grown from about half the first-year class to nearly 75 percent.

LESSONS LEARNED

UB continues their work based on key lessons and principles learned from the early stages of their initiative.

- **Institution-wide collaboration, communication, and input is key.** Monitoring and supporting roughly 20,000 students requires a large, dedicated staff and adoption of systems and strategies to support advisors and assess the effectiveness and validity of programs and instruments. Support from senior leaders is especially important. UB’s programs have required significant collaboration between academic affairs and student affairs as they share financial resources, staff, and leadership.

- **Campus resistance should be expected and respected.** UB acknowledges that, for various reasons, some students need more than four years to complete a bachelor’s degree. In addition, some UB faculty and staff members felt overwhelmed by new responsibilities and needed additional support, resources, and recognition for their contributions.

- **There is a further need to measure student success in terms of outcomes after graduation.** The National Student Clearinghouse, which provides national enrollment and degree completion data, identifies students who pursue further education but does not
provide data regarding what graduate program they pursue or what employment they secure after graduation. UB and other institutions would benefit from knowing if students’ first degrees are successful in preparing them for the subsequent level. Having the ability to connect data from a national student-level database to a comparable database with employment records would help universities around the country better track alumni employment outcomes.