

REPORT

Institutional Transformation for Student Success Lessons Learned from Ithaca S+R's Case Studies

October 20, 2016

*Jessie Brown
Martin Kurzweil*





Ithaka S+R is a strategic consulting and research service provided by ITHAKA, a not-for-profit organization dedicated to helping the academic community use digital technologies to preserve the scholarly record and to advance research and teaching in sustainable ways. Ithaka S+R focuses on the transformation of scholarship and teaching in an online environment, with the goal of identifying the critical issues facing our community and acting as a catalyst for change. JSTOR, a research and learning platform, and Portico, a digital preservation service, are also part of ITHAKA.

Copyright 2016 ITHAKA. This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. To view a copy of the license, please see <http://creativecommons.org/licenses/by-nc/4.0/>.

ITHAKA is interested in disseminating this brief as widely as possible. Please contact us with any questions about using the report: research@ithaka.org.

Introduction

Over the past decade, U.S. colleges and universities have faced increasing pressure from funders, policymakers, and advocates to improve degree completion rates and demonstrate their value to students.¹ At the same time, researchers have produced substantial evidence about the efficacy of a number of structural and pedagogical changes institutions can make to help students succeed. These changes include remedial course redesign, proactive advising and coaching, active learning pedagogies incorporating technology, and streamlined pathways through institutions.² Yet despite this great motivation and the availability of evidence-supported practices, relatively few higher education institutions have achieved rapid gains in student success.³

¹ See “The Completion Agenda” *Inside Higher Ed Booklet* (April 2014), <https://www.insidehighered.com/system/files/media/completion%20Agenda.pdf>; Katherine Mangan, “Despite Push for College Completion, Graduation Rates Haven’t Budged,” *The Chronicle of Higher Education* (December 16, 2013), <http://www.chronicle.com/article/College-Completion-Push-Fails/143619>; Katherine Mangan, “A Call for Big Changes to Meet a Big Challenge at Community Colleges,” *The Chronicle of Higher Education* (December 18, 2014), <http://www.chronicle.com/article/A-Call-for-Big-Changes-to-Meet/150927>.

² For information related to remedial course redesign, see, for example, the work of Complete College America at <http://completecollege.org/>; Designing Meaningful Developmental Reform,” Community College Research Center (March 2014), <http://ccrc.tc.columbia.edu/publications/designing-meaningful-developmental-reform.html>; Iris Palmer, “How to Fix Remediation at Scale,” New America Foundation (March 2016), <https://static.newamerica.org/attachments/12907-how-to-fix-remediation-at-scale/How-to-Fix-Remediation-at-Scale.61f8602de1cd43c6b7b6d70105fbc45a.pdf>. For research on proactive advising, see, for example, Eric P. Bettinger and Rachel Baker, “The Effects of Coaching in College: An Evaluation of a Randomized Experiment in Student Mentoring,” NBER Working Paper No. 16881 (March 2011), <http://www.nber.org/papers/w16881>. For research on active learning, see, for example, John Braxton, Willis Jones, Amy Hirschy, Harold Hartley III, “The role of active learning in college student persistence,” *New Directions for Teaching & Learning* 115(2008) 71-82. For background on academic and career pathways, see, for example, Richard Kazis, “MDRC Research on Career Pathways,” MDRC (March 2016), http://www.mdrc.org/sites/default/files/Career_Pathways_2016_Issue_Brief.pdf; Thomas Bailey, Shanna Smith Jagers, Davis Jenkins, *Redesigning America’s Community Colleges: A Clearer Path to Student Success* (Boston: Harvard University Press, 2015).

³ For example, at all two-year institutions, graduation rates for graduation within 150 percent of normal time fell from 30.5 percent for the 2000 starting cohort to 29.4 percent for the 2010 entering cohort. At four-year institutions, four year graduation rates increased from 33.7 percent for the 1996 starting cohort to 39.8 percent for the 2008 starting cohort. While increases are promising, these graduation rates are still low, especially for black and Hispanic students: twenty-one percent of black students and 30 percent of Hispanic students who entered four-year institutions in 2008 graduated within four years. See U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2002 and Spring 2007 through Spring 2015, Graduation Rates component; and IPEDS Fall 2008, Institutional Characteristics component, Table 326.10: Graduation rate from first institution attended for first-time, full-time bachelor’s degree-seeking students at 4-year postsecondary institutions, by race/ethnicity, time to completion, sex, control of institution, and acceptance rate: Selected cohort entry years, 1996 through 2008 and Table 326.20: Graduation rate from first institution attended within 150 percent of normal time for first-time, full-time degree/certificate-seeking students at 2-year postsecondary institutions, by race/ethnicity, sex, and control of institution: Selected cohort entry years, 2000 through 2010.

For many institutions, the challenge is not what to do—or why—but rather how to do it.

Since January 2015, Ithaka S+R has published a series of case studies focused on exactly this question: how have institutions with demonstrated success in improving student outcomes managed the implementation of effective and innovative practices?⁴ While each institution’s experience is unique, in the course of our research, we have identified a set of strategies that institutions have employed to develop, scale, and sustain institutional changes that improve student success. Four approaches appeared so frequently that we have come to describe them as “strategic essentials” for a student success-focused organization:

- **Committing to a student-centered mission and strategic plan.** It is critically important for senior leaders to articulate student success as an institutional priority, and to demonstrate a commitment to the institution’s stated goals and strategies through multiple channels of communication, both public and internal. These goals and strategic plans should be developed through a process that meaningfully engages multiple stakeholders throughout the institution.
- **Collaborating around student success.** Higher education institutions have numerous veto points, and are embedded in an ecosystem that shapes and is shaped by their policies and practices. Achieving improvement at scale requires meaningful, substantive collaboration among internal and external stakeholders around goals, design, planning, sharing practices, and iteration, as well as processes to coordinate activities across people and functions.
- **Aligning structures, resource allocation, and personnel to the strategic plan.** Existing institutional bureaucracy, budget priorities, and faculty and staff incentives and training generally serve as barriers to student-focused improvement. Shifting to a student-success orientation requires realigning administrative structures to break down silos and remove unnecessary complications for students; funding allocation processes that explicitly reinforce student success goals; and hiring, promotion, and faculty development processes that align faculty and staff incentives and expectations with student success goals.

⁴ To date, Ithaka S+R has published case studies of ten institutions, one system, and one consortium. These are Arizona State University, the Council of Independent College Consortium for Online Humanities Instruction, Florida State University, Georgia State University, Guttman Community College, Kaplan University, the North Carolina Community College System, the University of Central Florida, University of Maryland University College, the University of Pittsburgh, University of Technology Sydney, and Valencia College. Case studies on Long Beach City College, and the University of Austin-Texas and are forthcoming. For the full library, see http://www.sr.ithaka.org/publications/?fwp_publication_types=case-study.

- **Using data to continuously improve.** Data can be a powerful tool for change; but to take advantage of the insights that data analysis can offer, institutions must have a process for interpreting the results and using them to make adjustments that impact students. Tracking and reporting progress on metrics meant to test the success of improvement strategies will invest the broader community in this process, as well as inform revision of the strategies or their implementation. At a more tactical level, empowering a dedicated, cross-functional team to take a data-driven, systematic approach to solving problems that interfere with student success can enable an institution to accumulate a series of small improvements into broad impacts.

In addition to our case study research, these strategic essentials are supported by well-developed theories of organizational change and management for continuous improvement.⁵ In this light, the strategic essentials are not simply transitional strategies; they also position the institution to improve student outcomes iteratively over time.

The remainder of this report elaborates the strategic essentials using illustrative examples from Ithaca S+R case studies.

⁵ Three key frameworks include John Kotter's eight step model for change, which emphasizes a strong vision and leadership team, the creation of structural supports, and frequent communication; Adrianna Kezar's work on change in higher education, which highlights the need for collaborative "sensemaking" processes through which stakeholders can understand how their institutional identities and everyday activities support a changing organizational context; and research in improvement science, which focuses on how organizations can approach change so it becomes a continuous, iterative process that is integrated into the daily work of individuals at multiple levels of an organization. For Kotter, see John Kotter, "Leading Change. Why Transformation Efforts Fail," Harvard Business Review, Best of HBR (January 2007), <https://canvas.upenn.edu/courses/1258859/files/50636828/download?verifier=M6p2wYnqI2Y9rIKWO8ZHA307w1BC0aMenL26Qk7B&wrap=1>; John Kotter, *Leading Change*, (Boston: Harvard Business Review Press, 2012). For Kezar, see Adrianna Kezar, "A Synthesis of Scholarship on Change in Higher Education," Mobilizing STEM Education for a Sustainable Future, <http://mobilizingstem.wceruw.org/documents/synthesis%20of%20scholarship%20on%20change%20in%20he.pdf>; Adrianna Kezar, *How Colleges Change: Understanding, Leading, and Enacting Change*, (New York: Routledge, 2014), pp. 3-20; 84-107; Adrianna Kezar and Peter D. Eckel, "The Effect of Institutional Culture on Change Strategies in Higher Education: Universal Principles or Culturally Responsive Concepts?" *The Journal of Higher Education*, 73:4 (July/August 2002), http://muse.jhu.edu/journals/journal_of_higher_education/v073/73.4kezar.pdf; Adrianna Kezar and Peter Eckel, *Taking the Reins: Institutional Transformation in Higher Education*, (Westport: American Council on Higher Education, 2003), pp. 75-108. For influential literature on improvement science, see: See "How to Improve," The Institute for Healthcare Improvement, <http://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>; "The Six Core Principles of Improvement," The Carnegie Foundation for the Advancement of Teaching, <http://www.carnegiefoundation.org/our-ideas/six-core-principles-improvement/>; Sandra Park, Stephanie Hironaka, Penny Carver, and Lee Nordstrum, "Continuous Improvement in Education," Carnegie Foundation for the Advancement of Teaching (September 2014), http://cdn.carnegiefoundation.org/wp-content/uploads/2014/09/carnegie-foundation_continuous-improvement_2013.05.pdf; Anthony Bryk, Louis Gomez, Alicia Grunow, and Paul LaMahieu, *Learning to Improve: How America's Schools Can Get Better at Getting Better*, (Boston: Harvard Education Press: 2015).

Strategic Essentials

The strategic essentials are research-supported structures and processes that enable institutions to promote continuous improvement in student success. The details of how the strategic essentials are applied will depend on the particular circumstances of the institution applying them—their application is best thought of as adaptation, not adoption. To give a sense of that variation around the theme, for each essential we provide concrete examples of the strategy at work in several different institutional contexts.

Committing to a Student-Centered Mission and Strategic Plan

A clear statement of mission, a set of measurable goals, and concrete plans for achieving those goals are foundational to successful efforts to change institutional culture and practices to better support student success.⁶ Senior leaders must emphasize student success and student learning as institutional priorities, and communicate, through multiple public and internal channels, their commitment to student success-focused goals and strategies.⁷ Senior leaders should also create structured opportunities for institutional stakeholders at all levels to influence and inform the development of these goals and strategies. This community engagement and communication promotes successful implementation by fostering a sense of shared ownership and advancing a broad understanding of institutional priorities.

⁶ See Kotter, “Leading Change.” See also Jean Baldwin Grossman, Janet Quint, Jessica Gingrich, Oscar Cerna, John Diamond, Andrew Levine, Jacklyn Willard, “Changing Community Colleges: Early Lessons from Completion by Design,” MDRC (2015), http://www.mdrc.org/sites/default/files/changing_community_college_2015.pdf; “Science of Improvement: Establishing Measures,” Institute for Healthcare Improvement, <http://www.ihl.org/resources/Pages/HowtoImprove/ScienceofImprovementEstablishingMeasures.aspx>

⁷ In her work on transformational change at institutions of higher education, Kezar identifies senior administrative support as a core strategy in effecting institutional culture change. Support from senior leadership, explains Kezar, is important for effecting changes in institutional structures and processes, but is also crucial for mobilizing engagement in student-oriented change. See Kezar, “How Colleges Change,” and Kezar, “Synthesis of Scholarship on Change in Higher Education.”

A clear statement of mission, a set of measurable goals, and concrete plans for achieving those goals are foundational to successful efforts to change institutional culture and practices to better support student success.

Valencia College in Orlando, Florida, is an example of an institution with a deeply-embedded student-centered mission operationalized through a coherent, well-organized, and collaborative planning process. Since the 1990s, Valencia has built successive strategic plans around a set of “Big Ideas” about how students learn and how the institution can best support their success.⁸ Valencia’s strategic plans serve as a foundation for all campus activities—from professional development, to new initiative design, to budgeting—and the consistent focus on student success lends credibility and broad-based support for Valencia’s many learning-centered initiatives. Since its first strategic plan, Valencia has seen significant increases in persistence and degree completion rates.⁹

Valencia’s leadership consistently and emphatically reinforces these priorities to students, institutional stakeholders, policy-makers, and the general public. Sandy Shugart, president of Valencia since 2000, speaks widely about the institution’s orientation towards student success, and faculty indicate that, because of his consistency and visibility, they have great trust in Shugart’s dedication to the institution’s “learning-centered” mission. During his tenure, Shugart has made dramatic changes to campus operations to shift the culture from one of “stewardship,” focused on maximizing enrollment, to a culture of student success. To achieve this, Shugart transformed the budgeting process, the strategic planning process, and campus reporting requirements to reflect a more student-centric approach. These actions not only established the necessary infrastructure to support improved outcomes but also demonstrated Shugart’s credibility

⁸ See Valencia’s first Strategic Learning Plan (2001-2004), available at <http://valenciacollege.edu/lci/essays/plan.pdf>. See also “The Learning Centered Initiative,” Valencia College, <http://valenciacollege.edu/lci/>. Valencia defines its Big Ideas as “fulcrums for change, signifiers for emerging organizational culture, and rallying points for action.” For a conceptual overview, see Sandy Shugart, Joyce Romano, Julie Phelps, Ann Puyana, and Kaye Walter “Valencia’s Big Ideas: Sustaining Authentic Organizational Change through Shared Purpose and Culture,” <http://valenciacollege.edu/trustee-education/documents/big-ideas-trustees.pdf>.

⁹ For more on Valencia College, see Jessie Brown and Martin Kurzweil, “Collaborating for Student Success at Valencia College,” *Ithaka S+R* (October 29, 2015), <http://dx.doi.org/10.18665/sr.274838>.

as a leader devoted to transforming the institution to better support student success and student learning.¹⁰

Arizona State University (ASU) has similarly identified a set of clear goals for increasing enrollment, improving graduation rates, expanding research funding, and implementing innovative practices such as teaching with technology. To reinforce these goals, ASU's president, Michael Crow, has taken bold actions such as reorganizing departmental structures into interdisciplinary units, investing in and rapidly scaling ASU Online, and forging partnerships with an array of external organizations, most notably the University Innovation Alliance. By staking public claims to access, excellence, and innovation, Crow has also invigorated his campus community. Faculty and staff report that Crow's clear and compelling vision attracted them to ASU and motivates their student success work.¹¹

The North Carolina Community College System (NCCCS) also relies on a visible commitment bolstered by strong leadership and community support to improve student outcomes, albeit on the system-level rather than the institutional-level. Because developing a uniform mission and strategic plan across 58 diverse campuses would have been counterproductive, the System Office established a student success "strategic focus" called SuccessNC. SuccessNC establishes system-wide outcome goals and metrics and provides a framework that guides decision-making related to pursuing funding, scaling programs, and allocating resources. Key strategic initiatives include the implementation of performance funding, a redesign of remedial curricula, and the development of a robust data infrastructure that can guide decision-making related to student success.¹² Like Valencia's learning-centered strategic plan and ASU's bold vision, the NCCCS's strategic focus provides a foundation for student success efforts. System leaders, especially former System Office President Scott Ralls, have made this focus a central and visible part of institutional and system-wide processes.

¹⁰ Brown and Kurzweil, "Collaborating for Student Success at Valencia College."

¹¹ Kevin Guthrie, Christine Mulhern, and Martin Kurzweil, "In Pursuit of Excellence and Inclusion: Managing Change at Arizona State University," *Ithaca S+R* (January 20, 2015), <http://dx.doi.org/10.18665/sr.22996>. In awarding Crow one of its 2013 Academic Leadership Awards, the Carnegie Corporation of New York noted that Crow is "nationally known for his commitment to innovation and to reinventing the research university model to emphasize access and excellence." See the Carnegie Corporation of New York's press release dated December 9, 2013, <http://carnegie.org/news/pressreleases/story/view/carnegie-corporation-of-new-york-honors-higher-education-innovators-with-2013-academicleadership-aw/>.

¹² See Jessie Brown and Richard Spies, "Reshaping System Culture at the North Carolina Community College System," (September 10, 2015), <http://dx.doi.org/10.18665/sr.273638>. For SuccessNC, see "About SuccessNC," SuccessNC, <http://www.successnc.org/about-successnc>.

Collaborating Around Student Success

Higher education institutions are complex organizations with dispersed decision-making structures. They depend on many actors working independently to achieve their ends. Furthermore, colleges and universities are situated within ecologies—their city, state, and national governments and economies and a web of other organizations—that can impact the institutions and their students before, during, and after enrollment. As such, effective internal and external coordination and collaboration are critical to successful implementation of student success efforts.

Colleges and universities are situated within ecologies—their city, state, and national governments and economies and a web of other organizations—that can impact the institutions and their students before, during, and after enrollment.

Unfortunately, traditional postsecondary organizational structures often undermine, rather than facilitate, inter-institutional and intra-institutional collaboration.¹³ As Adriana Kezar, a scholar of organizational change in higher education has pointed out, factors like the distributed nature of decision-making authority and governance; value-driven environmental academic disciplines; tenure; and disparate organizational incentives all complicate the process of aligning incentives within institutions of higher education. Reorienting toward student success requires altering these structures and processes so that collaboration is part of the strategic planning and initiative design process, faculty and staff regularly share best practices and coordinate operations across functions and disciplines, and partnerships with extra-institutional partners reinforce institutional plans for improving student outcomes.

Collaborative Design and Planning

Many of the institutions we have researched have established an infrastructure that facilitates wide-spread participation in high-level planning efforts. For example, the

¹³ Kezar, “A Synthesis of Scholarship on Change in Higher Education: Mobilizing STEM Education for a Sustainable Future.”

University of Maryland University College (UMUC) makes collaborative planning a central part of its change management process. Though the Office of Student and Academic Affairs has primary responsibility for the design of UMUC's new competency-based academic model, the UMUC Provost and President engage stakeholders from areas across the university--from analytics, to student support, to student outreach—to weigh-in on how curricular changes will impact different functional areas.¹⁴ Additionally, as data analysis has become a larger part of UMUC's design and decision-making process, leaders have been particularly diligent about ensuring that data insights, often generated by the Office of Analytics, are contextualized within the expertise and experience of affected department members. Participants in planning and design processes are expected to contribute meaningfully to these efforts, rather than to merely passively approve of pre-determined administrative decisions.

At Valencia College, the strategic planning process involves data-focused convenings of hundreds of faculty, staff, and administrators called “Big Meetings.” Similarly, in planning large-scale initiatives that will impact multiple departments, Valencia leaders use participatory meetings to ensure that campus stakeholders not only remain informed but also have genuine input at all phases of initiative design. For example, in designing its latest suite of student success interventions focused on new students, Valencia used “Big Meetings” and also separated faculty, staff, and administrators into smaller working groups where they married theory and data with their own personal experience to generate potential institutional strategies for improving student outcomes.¹⁵

Finally, the process through which NCCCS redesigned its remedial math and English curricula provides a successful example of multi-level collaboration. Though the decision to redesign the math curriculum came from the state, planning teams included representatives from the state and the system office, as well as faculty and staff from range of individual institutions. The actual redesign of the curricula was left to coordinating teams of faculty from across institutions, who developed guiding frameworks that preserved institutional and instructor level-autonomy while providing a necessary level of standardization across the system. Because of the collaborative and integrated way in which the initiative was planned, as well as the flexibility that was built into the model, few stakeholders have resisted its system-wide implementation.¹⁶

¹⁴ Jessie Brown and Deanna Marcum. "Serving the Adult Student at University of Maryland University College." Ithaka S+R (June 9, 2016), <http://dx.doi.org/10.18665/sr.282666>.

¹⁵ Brown and Kurzweil, "Collaborating for Student Success at Valencia College."

¹⁶ Brown and Spies, "Reshaping System Culture at the North Carolina Community College System."

Cross-Functional Coordination

In addition to what might be termed “vertical” collaboration among institutional and departmental leaders, faculty, and staff described above, it is critically important for institutions prioritizing student success to create meaningful opportunities for “horizontal” collaboration and coordination. In the best examples we have observed, faculty and staff who interact with students are not constrained by administrative siloes, but instead work together regularly and closely to improve student success.¹⁷

It is critically important for institutions prioritizing student success to create meaningful opportunities for “horizontal” collaboration and coordination.

Guttman Community College, a CUNY community college that was founded in 2011 and designed with a singular focus on student success, does not have traditional disciplinary departments. Rather, Guttman’s academic model is organized around six, broad-based, interdisciplinary programs in which faculty, student affairs staff, and librarians work together to design the curriculum and support students. In Guttman’s innovative first-year program, faculty and staff meet weekly in instructional teams to discuss curriculum, align assignments, on-board new Guttman faculty, and address issues with particular students. This arrangement fosters a culture of shared responsibility for the first-year program’s integrated curriculum, and allows faculty and staff to draw from a broader base of insights to holistically support students.¹⁸

Institutions that are organized more traditionally than Guttman have a variety of structures for promoting cross-functional coordination. Georgia State University (GSU) and Florida State University (FSU)—two large public universities that have seen the largest gains in graduation rates over the past two decades—coordinate their work using weekly or bi-weekly meetings with the leaders of all functional areas that touch student

¹⁷ See Kezar, “Redesigning for Collaboration in Learning Initiatives: An Examination of Four Highly Collaborative Campuses.”

¹⁸ Jessie Brown and Martin Kurzweil, “Student Success by Design: CUNY’s Guttman Community College,” Ithaka S+R (February 4, 2016), <http://dx.doi.org/10.18665/sr.276682>. For more on Guttman’s first year program, see also Alexandra Weinbaum, Camille Rodriguez, and Nan Bauer-Maglin, “Instructional Teams at Guttman Community College: Building a Learning Community of Students, Faculty, and Staff,” Guttman Planning Documents (September 2013), <http://guttman.cuny.edu/wp-content/uploads/2014/08/ITReportFinal.pdf>.

support. UT Austin assembles the directors of their five intensive student success programs weekly (and other program staff bi-weekly) to facilitate communication around course registration, program schedules, and program design.¹⁹ Nash Community College, a small, rural community college in North Carolina, has regular cross-departmental meetings, which it has used to incorporate novel features and support programs into redesigned remedial math courses.²⁰ The University of Pittsburgh has tasked program committees—groups of faculty members responsible for each of the university’s hundreds of degree programs and for the general education curriculum—with using an annual learning outcomes assessment process to review and improve their programs’ design.²¹

Cross-Institutional Collaboration

A final form of collaboration takes place across institutional boundaries, with other educational institutions or community or industry partners. Such collaborations allow institutional stakeholders to better understand the various contexts in which students study and work (or will study and work) and to develop practices and policies that support students as they progress through academic institutions and on to employment.²²

For decades, Long Beach City College (LBCC) has worked with the Long Beach Unified School District (LBUSD) and Cal State University Long Beach (CSULB) to create a more seamless and supported pathway for students to move from one institution to the next, and eventually on to meaningful employment.²³ These efforts, collectively called the Long Beach Promise, begin with early outreach and field trips in elementary school to encourage students and their families to consider higher education as an opportunity within reach. All LBUSD middle school students and their parents are encouraged to make the College Promise Middle School Pledge to prepare for college and career, and

¹⁹ Martin Kurzweil and D. Derek Wu. "Building a Pathway to Student Success at Georgia State University." *Ithaka S+R*. Last Modified 23 April 2015. <http://dx.doi.org/10.18665/sr.221053>; Martin Kurzweil and Daniel Rossman. "Broad-Based and Targeted: Florida State University's Efforts to Retain Every Student." *Ithaka S+R*. Last Modified 28 April 2016. <http://dx.doi.org/10.18665/sr.278361>.

²⁰ Brown and Spies, "Reshaping System Culture at the North Carolina Community College System."

²¹ Martin Kurzweil. "Making Assessment Work: Lessons from the University of Pittsburgh." *Ithaka S+R* (January 19, 2015), <http://dx.doi.org/10.18665/sr.22999>.

²² One useful framework for understanding these types of partnerships is as "networked improvement communities." See, for example, Bryk, Gomez, Grunow, and LaMahieu, "Getting Ideas into Action: Building Networked Improvement Communities in Education."

²³ See "The Long Beach College Promise," <http://www.longbeachcollegepromise.org/>

LBUSD high schools promote internships, offer early assessments and corresponding interventions for college readiness, and actively encourage students to take AP Exams. LBCC offers a scholarship that covers a year of tuition for LBUSD graduates who attend full-time, and CSULB guarantees admission to LBUSD graduates who meet major eligibility requirements.²⁴

In another local, cross-institutional partnership, University of Central Florida (UCF) works with Valencia College and four other nearby community colleges to sustain a guaranteed transfer pathway for associate's degree graduates called *DirectConnect to UCF*. To enhance this pipeline, UCF and Valencia College are also currently working with Orlando area public schools to create a unified data system that would provide the postsecondary partners with more information about how to personalize support for incoming students. Rather than merely establish guaranteed transfer or scholarship policies, the Long Beach and Orlando partnerships involve regular working meetings among institutional administrators, faculty, and staff to improve relationships, manage curricular or policy changes that might impact student pathways, and smooth students' transitions.²⁵

Finally, institutions that have organized around student success leverage partnerships with local industry to inform their curriculum and provide students with employment experience and opportunities. For example, in addition to partnering with academic institutions, UCF, which calls itself the "partnership university," has a long history of building relationships with local employers such as Disney, and uses these partnerships to provide students with internships and other experiential learning opportunities. The Long Beach Promise recently expanded to include the city of Long Beach, which has committed to providing 800 internships to eligible students.²⁶ And, UMUC, which has a particularly strong focus on workforce development, has incorporated industry

²⁴ See "The Long Beach College Promise," <http://www.longbeachcollegepromise.org/>. Guaranteed LBSU admission is offered to first time freshman applicants from LBSUD and other local area schools who in high school have completed all college preparatory courses with satisfactory grades and meet other minimum admissions requirements. For press coverage, see Lillian Mongeua, "The Long Beach Miracle: How the working-class California city saved its schools," *The Atlantic* (February 2, 2016), [http://www.theatlantic.com/education/archive/2016/02/the-long-beach-miracle/459315/?single_page=true&print=](http://www.theatlantic.com/education/archive/2016/02/the-long-beach-miracle/459315/?single_page=true&print=;); David L. Kirp, "A New Way to Improve College Enrollment," *The New York Times* (November 14, 2015), <http://www.nytimes.com/2015/11/15/opinion/sunday/a-new-way-to-improve-college-enrollment.html>.

²⁵ See Brown and Kurzweil, "Collaborating for Student Success at Valencia College"; Jessie Brown and Martin Kurzweil, "Breaking the Iron Triangle at the University of Central Florida." *Ithaka S+R* (August 2015), <http://dx.doi.org/10.18665/sr.241922>.

²⁶ Jonathan Van Dyke, "City Partners Up With College Promise," *The Gazette* (October 13, 2014), http://www.gazettes.com/news/city-partners-up-with-college-promise/article_40a7f12a-5336-11e4-8d62-7f65e1d57e84.html

representatives into its planning for its new academic model, and will use industry insights and expertise to define the workforce-relevant competencies that will structure its new curriculum.²⁷

Aligning Resources, Structures, and Personnel

Even with committed stakeholders from across an institution and beyond, a student success-oriented strategic plan requires resources and infrastructure tailored to support it.²⁸ Relevant structural changes include realigning administrative structures to break down silos and remove unnecessary complications for students; funding and allocation processes that explicitly reinforce student success goals; and hiring, promotion, and faculty development processes that align faculty and staff incentives and expectations with student success goals.

Reorganizing Administrative Offices and Structures around Student Success

Traditional postsecondary administrative offices tend to be hierarchical and bureaucratic, slowing the process of change and reifying fractured organizational cultures. To combat the inertia created from these structures, many of the institutions we have studied creatively designed their administrative offices so that these offices are more centralized, collaborative and student-centric. For example, to facilitate its use of student data to identify and remove barriers to student progression and graduation, the GSU administration combined several critical, student-facing functions—including financial aid, academic support and advising, student accounts, admissions, and the registrar—under one vice provost. Managers of each function now meet weekly to address the tangled barriers that hinder student success.²⁹

UT Austin has taken a similar approach, consolidating student success efforts and related functions under a single vice provost, who has the imprimatur of the president and provost to champion the institution’s graduation goals. Among other activities, that vice provost, David Laude, has worked with the largest undergraduate colleges to develop intensive support program for first-year students, the directors of which meet regularly to ensure consistency in selection criteria and programs. Laude’s team has also

²⁷ Brown and Marcum, “Serving the Adult Student and University of Maryland University College.”

²⁸ Kezar refers to these as “structural supports,” and has argued that they are particularly important for sustaining collaboration and preserving values in times of fiscal scarcity. Similarly, Kotter argues that not removing obstacles to a new vision can hinder culture change, and advocates that leaders rethink organizational structures, team roles, and reward structures to align organizational processes with a new vision. Kezar, “How Colleges Change”; Kezar, “Redesigning for Collaboration in Learning Initiatives: An Examination of Four Highly Collaborative Campuses”; Kotter, “Leading Change. Why Transformation Efforts Fail.”

²⁹ Kurzweil and Wu, “Building a Pathway to Student Success at Georgia State University.”

improved coordination by creating a shared database of the supports that each student receives. Through these efforts, UT Austin ensures that the two thousand students who start their first year with the highest risk of not graduating are matched to a high-quality transitional support program.

At Guttman, both student affairs and academic affairs are the responsibility of the provost, and, as discussed above, faculty and staff are organized in interdisciplinary programs rather than in departments aligned to academic disciplines.³⁰ ASU has also reorganized a number of its departments into interdisciplinary units. This has facilitated innovative research as well as efficiencies and improvements in instruction.³¹

Student-Focused Resource Allocation

Institutions that have successfully organized around improving student outcomes build these goals into budgeting and other resource-allocation decisions. For example, each year, Valencia delivers a “Budget Planning Principles” report to the Board of Trustees that explicitly outlines how the budget is aligned with Valencia’s learning-centered goals, and how resource allocation will be used to support these priorities. Similarly, the University of Pittsburgh incorporates the results of its program-level learning outcomes assessment into the annual program review and budgeting process.³²

In addition to aligning their budgeting processes with student success goals and programs, some of the institutions we observed pursue revenue-generating opportunities explicitly to support student-centered missions. For example, in 2015, UMUC spun-off its Office of Analytics into a revenue-generating analytics service for other institutions.³³ The institution plans to reinvest the profits from this venture into scholarships and accessibility initiatives, especially for Maryland community college students. At Valencia, in order to fund learning-centered initiatives in recent years, the institution has leased bandwidth on campus owned-cell towers, lowered energy costs, enrolled more international students, and aggressively pursued grants that align with the college’s strategic priorities.³⁴

³⁰ Brown and Kurzweil, “Student Success by Design: CUNY’s Guttman Community College.”

³¹ Guthrie, Mulhern, and Kurzweil, “In Pursuit of Excellence and Inclusion: Managing Change at Arizona State University.”

³² Kurzweil, “Making Assessment Work: Lessons from the University of Pittsburgh.”

³³ This organization is called Heliocampus, see <http://www.heliocampus.com/>.

³⁴ Brown and Kurzweil, “Collaborating for Student Success at Valencia Community College.”

Prioritizing Student Success in Personnel Policies

Faculty incentives that do not emphasize teaching, learning, and innovation are a significant barrier to improving student success.³⁵ To remove that barrier, the institutions we studied have aligned faculty hiring, promotion, and tenure to student success goals; created opportunities and provided resources for innovation; and offered systematic professional development experiences that both reinforce and refine student success strategies.

Faculty incentives that do not emphasize teaching, learning, and innovation are a significant barrier to improving student success.

For example, Valencia College modified its tenure and promotion process so that each faculty member must complete an individualized learning plan and a research project that tests interventions on student learning.³⁶ Valencia's robust faculty development program also offers opportunities for faculty and staff to collaborate, share best practices, and think more holistically about student success. For example, Valencia's summer faculty development program, Destinations, includes workshops in which faculty and staff work with mentors to develop student-success projects based on several themes (usually determined by campus-wide initiatives or institutionally-defined educator competencies). These courses foster a community of practice in which faculty and staff share their own experiences with one another and collaboratively improve their teaching projects and practices based on a broad set of insights.³⁷

³⁵ See Rayane Alamuddin, Martin Kurzweil, and Daniel Rossman. "Higher Ed Insights: Results of the Spring 2016 Survey." Ithaka S+R (September 29, 2016), <http://dx.doi.org/10.18665/sr.284439>. Kezar argues that staff and faculty opportunities that promote a shared vision are crucial to supporting change efforts in higher education. More general change management and improvement science literature frequently cites the importance of building professional learning communities and designing incentives in institutionalizing a shared vision and strategy. See, for example Kezar, *How Colleges Change*, pp 70-71; Kezar, "Redesigning for Collaboration in Learning Initiatives"; "Shirley Hord, "Professional Learning Communities: Communities of Continuous Inquiry and Improvement," Southwest Educational Development Lab (1997), <http://files.eric.ed.gov/fulltext/ED410659.pdf>.

³⁶ See Brown and Kurzweil, "Collaborating for Student Success at Valencia Community College"; see also "Building a Faculty Culture of Student Success," The Aspen Institute (February 2013), <http://www.aspeninstitute.org/sites/default/files/content/docs/ccprize/BuildingaFacultyCulture.pdf>.

³⁷ Brown and Kurzweil, "Collaborating for Student Success at Valencia Community College."

UCF also focuses on faculty development to drive improved outcomes and institutionalize large-scale initiatives. The institution, which has made online learning a crucial part of its student-success strategy, requires every faculty member who teaches an online or blended course to participate in a six-week training and design workshop. Faculty in the training program are each paired with an instructional designer who coaches the faculty member through the course development process and beyond. UCF offers course release and stipends for participating in the training program, and several departments give credit in tenure and promotion decisions for course development and learning research.³⁸

In line with the needs of its adult, “non-traditional” student population, nearly all of UMUC’s courses are taught by adjunct faculty that UMUC calls “scholar-practitioners,” meaning that they have advanced degrees and actively work in the field in which they teach. Institutional leaders explain that giving students the opportunity to learn from professionals in their field adds richness to UMUC’s curricular focus on workforce development. Additionally, the absence of tenure and limited disciplined-based research preserves a student-centric, rather than a faculty-centric, institutional approach.³⁹

Using Data to Continuously Improve

“Data” is often seen as a solution to student-success challenges, but it is in fact simply raw material for improved processes and impactful changes. Even a sophisticated analytical tool is only a tool. To take advantage of the insights that data analysis can offer, institutions must have a process for interpreting the results and using them to make adjustments that impact students. Many of the institutions we have studied track and report progress on metrics meant to test the success of their strategies, and use results on those metrics to inform revisions to those strategies or their implementation. Several institutions also empower dedicated, cross-functional teams to use data systematically to identify and address obstacles to student success.

Tracking and Reporting on Strategic Goals

Tracking and reporting on strategic targets serves a number of purposes. Primarily, it allows institutional leaders to assess the effectiveness of their strategies for achieving strategic goals, and provide insights into how strategies might be revised. Equally

³⁸ Brown and Kurzweil, “Breaking the Iron Triangle at the University of Central Florida.”

³⁹ Brown and Marcum, “Serving the Adult Student and University of Maryland University College.”

important, is the sense-making role that the tracking and reporting of data plays.⁴⁰ We've heard from stakeholders at several of the institutions we observed that surprisingly poor statistics, shared broadly throughout the institution, created a sense of urgency and catalyzed broad-based support for large-scale change. Similarly, stakeholders report that tying metrics to strategic goals and reporting regularly on institutional progress towards those metrics lends credibility to institutional strategies, and gives stakeholders tangible benchmarks for their hard work.

There are many examples of the success of this strategy in our case studies. For example, in developing its 2014-2019 strategic plan, LBCC established concrete metrics for each goal, and its Office of Institutional Effectiveness tracks and reports widely on annual progress towards these goals.⁴¹ NCCCS has similarly quantified goals within its SuccessNC strategic focus. Not only does the System Office track annual progress towards these goals—at the system and at the institutional level—it also allocates state-funding to institutions based on their progress towards these student-success oriented targets.⁴² Leaders at UCF, ASU, FSU, GSU and UT Austin have all communicated broadly about their measured progress towards improving student access and outcomes.⁴³

Ongoing Data-Based Inquiry and Problem Solving

Improving student success is a dynamic, multi-faceted challenge. Changing one practice may help some students while simultaneously revealing previously unrecognized barriers for those or other students. Addressing such a complex, shifting problem requires a nimble, yet systematic approach.⁴⁴ We have observed several institutions that have

⁴⁰ In her work on institutional change in higher education, Adrianna Kezar explains that the provision of data and information is a key component of organizational learning and sensemaking. See Kezar, *How Colleges Change*, 63-73.

⁴¹ "Long Beach City College 2011-2016 Educational Master Plan," Long Beach City College, http://www.lbcc.edu/Planning/documents/EMP_2011-16_Final.pdf.

⁴² See Brown and Spies "Reshaping System Culture at the North Carolina Community College System" and "Performance Measures and Funding," SuccessNC, <http://www.successnc.org/initiatives/performance-measuresfunding>.

⁴³ See, for example, the University Innovation Alliance, of which ASU, GSU, UCF, and AT Austin are a part: <http://www.theuia.org/>.

⁴⁴ This on-going and widespread orientation towards evidence-based inquiry and data-driven problem solving is a key aspect of the sort of continuous improvement processes described in improvement science literature. In improvement science's Plan, Do, Study, Act (PDSA) methodology of inquiry, change agents are specific about what they are trying to accomplish, develop evidence-based changes to achieve that accomplishment, use data to study the effects of that change, and then act based on their analysis. Organizations that are effective at improving and learning make this sort of inquiry-based approach to problem solving part of their daily operations at multiple levels, and embed it into larger-scale processes of initiative design and implementation. See "Changes for Improvement," Institute for Healthcare Improvement, <http://www.ihl.org/resources/Pages/Changes/default.aspx>; Garvin, "Building a Learning Organization"; Alicia Grunow,

accumulated numerous small gains into very significant improvements in student outcomes by taking just such a data-driven, systematic approach to solving problems that interfere with student success.

Changing one practice may help some students while simultaneously revealing previously unrecognized barriers for those or other students. Addressing such a complex, shifting problem requires a nimble, yet systematic approach.

Some institutions have concentrated these efforts in a relatively small, central team that works collaboratively with faculty and functional areas to implement changes. For example, dedicated teams at FSU and GSU have used data to segment portions of the student population to identify barriers that specific student groups face. These teams develop, test, and iterate upon policies and programs to remove these barriers. While many of these efforts focus on retrospective analysis for the purpose of program refinement, some have led to the development of real-time analysis to help administrators or faculty support students, and both institutions' have done pioneering work on predictive analytics for advising. Similarly, UMUC's newly established Office of Analytics employs a highly-skilled team of analysts who work in collaborative partnerships with the functional areas in which they have expertise, and are instrumental in departmental and institutional decision making.

Adopting a slightly different approach, Kaplan University has developed a "Research Pipeline" through which course-level interventions can be tested through randomized control trials for their impact on student success and implemented at scale if successful. The Pipeline, managed by a team of faculty, administrators, and social scientists, stemmed from a desire to develop evidence about how to apply general learning science research to the adult, online, students at Kaplan University. Ideas for interventions are developed by faculty and research pipeline staff alike, and the pipeline has generated several interventions that have been scaled throughout the institution.⁴⁵

"Improvement Discipline in Practice," Carnegie Foundation for the Advancement of Teaching (July 21, 2015), <http://www.carnegiefoundation.org/blog/improvement-discipline-in-practice/>.

⁴⁵ Jessie Brown and Martin Kurzweil. "Engineering Learning at Kaplan University." Ithaka S+R. Last Modified 6 October 2016. <http://dx.doi.org/10.18665/sr.284711>.

Some institutions have extended this inquiry practice more broadly among stakeholders. For example, faculty and staff from UCF, Valencia College, and other partner schools that participate in *DirectConnect to UCF* regularly gather to discuss enrollment and success data from their programs, and determine the best ways to streamline the transfer process for students.⁴⁶ Guttman Community College faculty and staff participate in as many as nine assessment days throughout the academic year, during which they closely review student assessment data and artifacts of student work in collaborative teams.⁴⁷ And, UT Austin gives 100 program directors across many of its departments and colleges real-time access to its student program database. Directors regularly share this information with advisors and faculty so that a broad range of stakeholders can understand student progress and potential hindrances.

At all of these institutions, regularized, data-driven processes of inquiry are built into institutional culture and practice. There is an expectation amongst staff, faculty, and administrators that initiatives will be studied rigorously and in collaboration, and that stakeholders will use data to learn from and improve upon student-centered efforts.

Conclusion

In her research on organizational change in institutions of higher education, Adrianna Kezar points out that, because of their distributed decision-making systems, multiple power and authority structures, and misaligned goals, colleges and universities are unique and challenging contexts for change. These idiosyncratic organizational factors have contributed to a dominant narrative in which change and innovation at postsecondary institutions is nearly impossible, or necessitates significant friction and turmoil, especially between faculty and administrators.

Our experiences studying institutions that have organized around student success have confirmed that large-scale change at postsecondary institutions can be difficult, but is far from impossible, and need not generate friction between stakeholders. By demonstrating commitment to a student-centered mission, creating meaningful opportunities for collaboration, aligning institutional structures to better support student success, and using data to track progress and solve problems, the institutions we have discussed here have shifted beliefs, norms, and practices to effectively and continuously improve upon student outcomes.

⁴⁶ Brown and Kurzweil, "Breaking the Iron Triangle at the University of Central Florida."

⁴⁷ Brown and Kurzweil, "Student Success by Design: CUNY's Guttman Community College."